

ANALYSIS OF POSTSECONDARY VOCATIONAL ADJUSTMENT
OF MILDLY HANDICAPPED STUDENTS RESIDING IN
RURAL COUNTIES IN FLORIDA

BY

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Abstract of Dissertation Presented to the Graduate
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The purpose of this study was to examine the background of formerly labeled mildly handicapped students to determine what educational variables were predictive of the occupational status of those former students. Several areas of related literature were examined including data-based research and program planning in special education, vocational education, and rural education.

The population was composed of 113 formerly labeled mildly handicapped students in four rural Florida counties. The researcher collected information on the demographic and (secondary) academic background of the former students; these data were the independent variables. The former students were then interviewed regarding their current and previous employment status; these data formed the dependent

variable. These variables were reviewed and statistical measures were used to describe and investigate the relationship between the dependent variable and several independent variables.

The descriptive statistics signified that the majority of former students completed the 12th grade. These statistics also disclosed that former special education students received little vocational training. The statistics related to the dependent variable indicated that former students were employed an average of 50 percent of the time after termination of their secondary education.

Correlational analyses expressed a positive relationship between years of school completed and employment status. The analyses also presented a significant relationship between certain academic variables (e.g., mathematics level and reading level) and employment status. Findings were inconclusive as to whether a significant relationship existed between special education classification and employment status.

The concentration of this research examined the secondary education, demographic data, and occupational status of rural Floridians formerly identified as mildly handicapped students. Analyses of these data determined those variables predictive of occupational success for the postsecondary formerly labeled mildly handicapped student.

CHAPTER I

INTRODUCTION

In recent years public schools have become increasingly sensitive to the needs of handicapped children and youth. The original public school intervention (e.g., during the 1950s) for mildly handicapped youth focused mainly on remedial academic skills instruction. However, with the support of educators, parents, and legislators, a broader, more comprehensive education became available to the mildly handicapped student. Comprehensive education ranges from preacademic skills on a kindergarten level to personal-social skills on an adult level. Vocational or occupational training is now considered an established option as an educational intervention for the mildly handicapped by many educators (Alley & Deshler, 1979; Boyan, 1978; Brolin & Kokaska, 1979; Cullinan & Epstein, 1979; Halpern, 1979; Marsh & Price, 1980).

Legislation supports intervention for the mildly handicapped student. For instance, P.L. 94-142 states that the term special education includes vocational education if it is designed to meet the needs of the student (Razeghi & Davis, 1979). Other legislation, such as the Rehabilitation Act of 1973 (or P.L. 93-516), is concerned with the handicapped youth as he/she enters the job market. The

Vocational Education Amendment of 1976 (P.L. 94-482) requires the individual states to expend 10 percent of their federal vocational education allotment in assisting handicapped persons to participate in vocational education programs.

Following the inclusion of vocational training for some exceptional students, researchers began investigating the post high school occupational adjustment of those youth (Becker, 1976; Brolin, 1978; Brolin, Durand, Kromer, & Muller, 1975; Halpern, 1973; Kokaska, 1968; Titus & Travis, 1973; Vande Garde, 1973). The bulk of research concerned with the postsecondary occupational adjustment of the mildly handicapped has been accomplished in urban areas. Various postsecondary follow-up studies differ in procedures, geographic location, and adjustment criteria. However, some conclusions have been drawn from the follow-up studies that help educators plan programs to assist handicapped students in making successful adult adjustments. Curricular considerations, for example, include work-study programs, career education, prevocational training, employability skills training, cooperative education, and vocational-technical training for mildly handicapped secondary (grades 7-12) students. The literature indicates that these curricular interventions did help mildly handicapped students find jobs as adults. The programs that receive curricular interventions such as those mentioned here are usually located in standard metropolitan statistical areas (SMSA). The SMSA areas are defined by the Bureau of the Census as having at least one city of 50,000 inhabitants or more. Because of their definition which includes population density,

SMSA areas usually have resources such as industry, higher economic standards, public transportation, social programs, comprehensive education, and other benefits (Thompson, 1980).

On the other hand, nonmetropolitan or rural areas do not have a large population and consequently do not have large industries, public transportation, social/welfare agencies, and other benefits that are usually available in metropolitan areas. Cosby (1979) noted that rural areas also often have structural and cultural obstacles that deny or affect achievement by rural students. Along with these obstacles, lack of education and/or lack of employment opportunities may hinder the progress of many rural American youth, particularly handicapped youth. Studies by the National Rural Project (NRP) have indicated that problems implementing educational programs for the handicapped do exist in rural school districts throughout the nation (Helge, 1980). Further, a pilot study (Schwartz, Hensel, & Westling, 1980) indicated that the postsecondary adjustment of handicapped students in some rural areas of Florida is poor. The challenge of preparing the handicapped student in rural areas should not be neglected since 67 percent of all school districts are located in rural areas and 33 percent of all school children/youth live in those districts (Sher, 1978). In Florida, 37 of the 67 counties are considered nonmetropolitan (Thompson, 1980).

Currently, there has been little research relative to factors which influence the postsecondary adjustment of rural handicapped youth. Clearly, information of this nature is important to use as educators

plan appropriate education for mildly handicapped secondary students. One major goal for mildly handicapped secondary students is the accomplishment of the independent living skills that lead to self-sufficiency. Training in these skills will help special needs students function in and contribute to their own home and community. Further research about the postsecondary adjustment of formerly labeled mildly handicapped students will yield information that will help educators determine appropriate curricula considerations for present and future handicapped youth.

The Purpose of the Study

The purpose of this study was to examine the secondary education background, demographic data, and occupational status of formerly labeled mildly handicapped students in rural areas of Florida. The educational background of the former students was compared with the occupational status of those same students. The same comparison was made between demographic data and occupational status. The resulting analysis determined those variables predictive of occupational success for the postsecondary former handicapped student.

Justification

While much research has been conducted regarding the vocational adjustment of former handicapped students, the bulk of research was accomplished in urban areas. Residence in rural areas presents unique

problems to handicapped youth in both educational and vocational opportunities. There was a need to investigate the postsecondary adjustment of handicapped youth and the possible educational variables that affected the adjustment.

Subjects

The subjects were 113 former special education students in four rural Florida counties. Subjects had been identified by a staffing team as needing special education services in (a) educable mental retardation (EMR), (b) specific learning disabilities (SLD), or (c) emotional disturbance (ED). The subjects had been enrolled in secondary special education at least one year during grades 9-12. These students had received at least one year of instruction in pre-vocational or vocational courses during grades 9-12.

This group of subjects did not include those former students temporarily placed in area schools by welfare agencies. It also did not include former students that had entered and withdrawn the same school year. There were a total of 113 subjects from the four counties.

Variables Under Investigation

I. Information concerning the secondary education of rural mildly handicapped students included

A. Special education classification.

- B. Extent of vocational coursework. This included semesters/credits in actual specific occupational preparation.
- C. Extent of prevocational coursework, which included semesters/credits in occupational exploration, home economics, industrial arts, work study, or agriculture.
- D. Academic achievement. This indicated the most recently recorded achievement level in arithmetic and reading.
- E. Days absent. The total days absent during the final year of school were noted, when that record existed.

II. Information concerning the employment adjustment of former secondary handicapped students included the subjects:

- A. Current employment status
 - 1. Job title
 - 2. Salary per hour or week
 - 3. Hours per week
 - 4. Length of time employed
- B. Previous employment status
 - 1. Job title
 - 2. Salary per hour or week
 - 3. Hours per week
 - 4. Length of time employed

III. Demographic Information concerning the former handicapped students included

- A. County residence
- B. Age
- C. Sex
- D. Race
- E. Months out of school

Questions Under Investigation

The general topic of interest in this study was the relationship between the secondary academic background of rural formerly labeled mildly handicapped students and the students' subsequent adult occupational adjustment. Specifically, questions addressed were the relationship between

- (1) the number of years in school and adult occupational adjustment.
- (2) the degree of prevocational training and adult occupational adjustment.
- (3) the amount of vocational training and adult employment status.
- (4) reading comprehension level and adult employment status.
- (5) math application level and adult employment status.
- (6) special education classification and adult employment status.

Limitations

This study was conducted in four of the 37 rural counties of Florida. The definition of rural counties reflects the criteria determined by the U.S. Bureau for the Census for non-metropolitan areas. The four rural counties, although located in different geographic areas, may not reflect school districts in the remaining 34 counties.

This research focused on the mildly handicapped (i.e., EMR, ED, and LD) secondary students who had been enrolled in public school programs and had left the school system within the last three years. Former students had received at least one year of special education and one year of vocational or prevocational training, during the school years 9 through 12. The study did not include those students temporarily placed or who had withdrawn during their ninth year of school.

This study focused on the mildly handicapped student who had received both special and vocational education. It did not reflect the mildly handicapped population that has not been identified. It also did not reflect those students who were currently enrolled in school. Finally, it did not include special education students who were not enrolled in vocational programs.

Definition of Terms

Mildly Handicapped Youth—Secondary or postsecondary individuals who are presently or were formerly members of special education

programs in rural counties. They had been labeled educable mentally retarded (EMR), learning disabled (LD), emotionally disturbed/handicapped (ED), during their secondary academic history.

Educable Mental Retardation—The most commonly accepted definition of educable mental retardation includes subaverage intellectual functioning existing concurrently with deficits in adaptive behavior. The I.Q. range for educable mentally retarded students is usually between 50-70 (Brolin & Kokaska, 1979).

Specific Learning Disability—"Specific learning disability" means a disorder in one or more of the basic psychological processes involved in understanding or in using language, spoken or written, which may manifest itself in an imperfect ability to listen, think, speak, read, write, spell, or to do mathematical calculations. The term includes such conditions as perceptual handicaps, brain injury, minimal brain dysfunction, dyslexia, and developmental aphasia. The term does not include children who have learning problems which are primarily the result of visual, hearing, or motor handicaps, of mental retardation, or emotional disturbance, or of environmental, cultural, or economic disadvantage (U.S. Office of Education, 1977, p. 65083).

Emotional Disturbance—Generally, emotional disorders may be thought of as mental health problems that cause the individual personal discomforts which interfere with the ability to function at school or in training, interfere with family and other interpersonal relationships, and impair vocational functioning (Brolin & Kokaska, 1979).

Special Educators—These individuals were employed in a rural county to teach (mildly) handicapped students. The particular certification held (i.e., MR, LD, ED) was not significant for the purpose of this study.

Vocational Educators—Teachers employed by a school system in a rural county to teach vocational education in secondary school or in a vocational technical school. For the purpose of this study, they must have taught handicapped students, in addition to nonhandicapped students.

Rural Counties—One of the 37 political subdivisions of the State of Florida that was not classified as a Standard Metropolitan Statistical Area by the U.S. Bureau of the Census.

The Standard Metropolitan Statistical Area (SMSA)—Defined by the U.S. Bureau of the Census (Thompson, 1980) in two ways:

1. An SMSA is a county or group of counties which contains at least one city of 50,000 inhabitants or more, or twin cities with a combined population of at least 50,000. In addition to the county or counties containing such a city or cities, contiguous counties are included in an SMSA if, according to certain criteria, they are socially and culturally integrated with the central city.

2. A city of at least 25,000 inhabitants which together with those contiguous places (unincorporated or incorporated) having a population density of at least 1,000 persons per square mile and having a combined population of 50,000 and constitutes for general economic and social purposes a single community. In addition, the

county or counties in which the city or cities are located must have a total population of at least 75,000 and will also constitute a standard metropolitan statistical area.

Prevocational Education (Exploratory)—Shop or laboratory instruction, including prevocational industrial arts, designed to give students first hand exploratory experiences with the kinds and levels of work performed in a broad range of occupations for which special skills are required (Florida Department of Education, 1980).

Vocational Education—Organized instruction which is directly related to the preparation of individuals for employment or for advancement in their present employment (Florida Department of Education, 1980).

Summary

This study examined the postsecondary adjustment of formerly labeled mildly handicapped students in four rural counties of Florida. Background academic information was collected for each former student and those data were compared to the postsecondary occupational status of each student. This analysis suggested several educational variables that influenced the postsecondary adjustment of former mildly handicapped students.

CHAPTER II

REVIEW OF LITERATURE

Introduction

For several decades this nation has been pursuing the goal of educating handicapped children in public schools. The initial interest in this goal was followed by program planning designed to meet the specific needs of handicapped children and youth. The planning began to be locally implemented, changed as necessary, and reimplemented. Gradually more educational options became available to handicapped pupils in order to provide a comprehensive public school experience. As a part of comprehensive program planning, vocational education became a viable alternative to the secondary student (Hensel, 1981; Kokaska, 1969).

The development and implementation of education for the handicapped initially occurred in metropolitan areas where personnel, support services, transportation, and funding were accessible. Consequently, the experimental and descriptive research concerned with the success of program planning also took place in metropolitan areas. Although the same program plans may be reproduced in nonmetropolitan (e.g., rural areas), there is little research or literary documentation accompanying the plans. For this reason, most of the data based

literature reflecting the inclusion of special/vocational education for the handicapped describes an urban situation (Kokaska, 1968).

In order to provide a comprehensive description of the status of vocational education for special needs students in rural areas, several related topics in education must be addressed. The related topics reviewed include (a) special education in urban areas; (b) a description of educational concerns in rural areas; and (c) vocational education for rural disadvantaged or handicapped students.

Occupational Skills Curricula

A review of curriculum models reveals that a variety of programs for providing prevocational and vocational education to handicapped youth have been implemented in this nation. Programs range from elementary level career awareness to more sophisticated hands-on vocational units. A national study, conducted over a three year period, Project PRICE (Brolin, 1978), indicated that handicapped students require competencies found in three career education areas including social-personal, occupational guidance and preparation, and daily living skills. Occupational skills, according to Brolin and Kokaska (1979), include the following examples:

- (a) knowing and exploring occupational possibilities;
- (b) selecting and planning occupational choices;
- (c) exhibiting appropriate work habits and behaviors; and
- (d) physical-manual skills.

The delivery system for the competencies may vary, but Project PRICE indicated that a solid knowledge base in each of the three areas is

necessary for successful adult adjustment. Career education proponents emphasize that occupationally oriented training makes academic information more relevant and meaningful for the handicapped youth (Clark, 1980). Porter (1980) studied 30 junior high school mildly handicapped students, half of whom received a career education program and half of whom received traditional special education. A comparison of the two groups showed that the group which had received the career education emphasis showed growth in language, reading, and math. The group that did not receive career education curricula only showed growth in language.

Work Experience Follow-Up Studies

The worth of work experience as a delivery system for career education curricula is supported by several follow-up studies of the adult adjustment of formerly classified EMR youth. Halpern (1973) conducted a follow-up study of 30 percent of the work experience terminators in 14 school districts in Oregon. These 108 former students were randomly selected and placed in two groups, each group being one year out of school. All interviews were conducted in person and information was collected concerning demographic, social, and vocational variables. The follow-up study measured the actual employment of former EMR students and an "employment index" was constructed from the interview data to provide a longitudinal measure of each subject's work history over a 12-month period. The researcher also considered the rate of unemployment for the state of Oregon during the time of the follow-up study. The results of the follow-up study

were compared with general community employment. There was an apparent decline in vocational opportunities during this period with Oregon's unemployment rate in 1969 and 1970 being lower than the national rate. The results of the follow-up revealed the following:

1. When the level of community unemployment is high, mentally retarded persons new in the labor market have difficulty finding jobs.
2. When community economic conditions deteriorate, mentally retarded workers are not necessarily in jeopardy of losing their jobs.
3. Mentally retarded persons who are assisted by well-structured vocational training programs have a good chance of finding jobs, regardless of the level of general community unemployment.

Based on these findings, Halpern suggests that former special education students are not automatically losers in competition for employment. Even in conditions of economic hardship, the mentally retarded student has his/her employability potential enhanced by appropriate vocational training (Halpern, 1973).

Another follow-up study, accomplished by Brolin, Durand, Kromer, and Miller (1975), also attempted to measure the work history of former special education students. The study focused on 71 randomly selected former EMR students who had attended Minneapolis high school between the years 1966-1972. The subjects were described as being in one of three levels of vocational adjustment, including

- (a) Average or better; employed 75 percent or more of the time since high school; averaged 30 hours/week; earned \$75.00/week or more;

and satisfaction with job indicated by employer, student, or parent (two out of three or three out of three).

(b) Fair; employed 50 percent or more of the time since high school; averaged 20 hours or more per week; earned \$50.00 or more per week; and satisfaction with job indicated by student or parent.

(c) Poor; did not meet the above criteria.

The former students were divided into two groups; students who had a work study experience and students who had an academic program only. The results (Table 1) indicated that students receiving a work study program attained a significantly better overall degree of vocational adjustment.

Table 1
Vocational Adjustment of Former EMR Students

Vocational Adjustment	Type of Program		Total (71)
	Work Study (24)	Academic (47)	
Average or better	7(29%)	8(17%)	15(21%)
Fair	12(50%)	13(28%)	25(35%)
Poor	5(21%)	26(55%)	31(44%)

All jobs held by the former students were categorized according to Dictionary of Occupational Titles (DOT)(1977). Half of the former students' jobs were in service occupations, such as dishwasher, kitchen help, busboy, waitress, nurses aid, or maid. The remainder of the students were in primarily unskilled jobs. The study found that a substantial percent of former special education students (44 percent) were not making good adult adjustments. The primary reasons for poor adjustment were listed as (a) unemployment, (b) low pay, (c) low level jobs, (d) lack of experience, (e) lack of appropriate skills, and (f) lack of job openings. The findings of the study seem to support a career education approach for EMR programs and to support giving former students more post-school assistance in order to enhance adult adjustment.

A doctoral investigation by Mock (1974) compared former EMR graduates of a work study program with former EMR graduates of a traditional program, both in Orange County, California. Mock randomly selected a sample of former students from each of the two programs and collected information about students' academic history and current lifestyle. Of the work study program graduates, 68 percent were employed at the time of the study and 38 percent of the traditional program graduates were employed. The average wage per hour for the work study graduates was \$2.55 and for the traditional graduates the average was \$2.13 per hour. The comparison of the two groups also indicated that work study graduates were employed for longer periods of time and held higher level skilled jobs than did the traditional

program graduates. On the other hand, no significant differences were noted between the two groups regarding recreation or leisure activities and the majority of subjects lived at home.

Some of the follow-up studies located by this researcher had similar methods and outcomes. However, the same approximate results could elicit completely different conclusions by the respective authors. For example, Crain (1980) investigated the socioeconomic status of EMR graduates of traditional special education (that included vocational training) in St. Louis, Missouri. Twenty-five subjects were randomly selected from each of six different graduating classes from the years 1962 to 1977. Of the total number of subjects selected, 130 subjects participated. One hundred of the subjects had received vocational training; the remainder had not. Current occupational information was obtained for the 130 subjects and this information was compared with the occupational data for the total St. Louis County. Crain found that 68 percent of the graduates were in the civilian labor force. Another 32 percent were not in the civilian labor force, which is comparable to the 33 percent of the U.S. population (age 16 and over) which were also not in the civilian labor force. The unemployment rate of EMR graduates (7.9 percent) was not significantly different for the unemployment of St. Louis County residents, which was 5.5 percent. Based on this comparison of the former EMR students' employment rate and the general population rate, Crain concluded the results reflect a positive status for the majority of former students. The study showed that the majority of students were earning salaries of approximately \$7,000 which was \$1,000 above minimum wage. The author also

found that vocational training accounts for the degree of occupational adjustment of those graduates employed. The following table describes the findings of the study (see Table 2).

Another report resulted in similar employment rates for former students, but made different conclusions about the data. A follow-up study by Lussie, Hanford, and O'Leary (1979) examined the post high school status of 76 mildly retarded graduates (from 1974-1978) of work study programs in Iowa. The subjects were interviewed and results were analyzed in terms of percentages and arithmetic means in four areas. The four areas of interest were social adjustment, community resources, vocational adjustment, and economic adjustment. Results of the interviewing process showed that 69 percent of the graduates were employed at the time of the study. Of that group, 75 percent found jobs through the efforts of the work study coordinator. The majority of male graduates were paying most of their living expenses; however, the majority of females were paying none of their own expenses.

The authors concluded, from the above results, that many of the graduates were not adjusting satisfactorily. This conclusion opposes the view by Crain (1980) that these results are positive. The report cites the lack of social skills, lack of opportunities to upgrade daily living and vocational skills, and lack of knowledge of community resources as reasons for the 31 percent unemployment. However, the work study program itself was shown to be a positive influence for successful adult adjustment. The authors recommended a variety of program improvements including competency based occupational skills

Table 2
Labor Force Status of EMR Adults

Labor Force Status	Number	Percent
In Civilian Labor Force	88	67.7
Employed	81	62.3
Unemployed	07	5.4
Not in Civilian Labor Force	42	32.3
Further Training	7	5.4
Sheltered Workshop	14	10.7
Totally Disabled	2	1.5
Institutionalized	1	0.8
Not Seeking Employment	11	8.5
Ill	3	2.3
Homemaker	4	3.1
Total in Study Group	130	100.0

development and cooperation and participation by vocational rehabilitation services.

Nixon (1973) examined the occupational adjustment of EMR students trained in Philadelphia schools. Of a total of 1,000 former students, 750 participated in the study and provided information about their occupational status. The validity of the responses was checked by interviewing 25 of the former students' employers. The researcher defined occupational adjustment as maintaining employment for six months or more. Results showed that 78.4 percent of the respondents were employed, and 53.5 percent had been employed for six months or more. Of the male employed subjects, 40.3 percent were working in service occupations and 38.1 percent were classified as working in miscellaneous occupations. Of the employed female subjects, 75 percent were working in service occupations and 10.5 percent were working in bench occupations. Several factors were found to be significantly related to occupational adjustment, including (a) training in occupational centers, (b) graduation (rather than dropping out) from programs, (c) "C" grades or better, (d) third year or better reading and arithmetic skills, and (e) higher socioeconomic levels.

A comprehensive prevocational curriculum for mildly handicapped students in LaGrange, Illinois, was implemented by the Department of Special Education and Vocational Rehabilitation. The curriculum components included occupational counseling, work experience, and on-the-job training. In order to judge the merits of the program, a follow-up study of three years of graduates was conducted (Titus &

Travis, 1973). A total of 38 graduates were surveyed including 23 men and 15 women. The follow-up showed that all but one of the graduates were gainfully employed. An analysis of positions held by graduates showed that females most often found employment in institutional services such as cafeteria or housekeeping positions. Male graduates were most often employed by small businesses as laborers or clerks. A total of 57 percent of the graduates were still employed by their first employer. The range of salary was from \$1.40 per hour to \$3.45 per hour, with a median of \$2.08 per hour.

A comparison of vocational training and on-the-job training as ways of improving the postsecondary adjustment of EMR students in Michigan was accomplished by Baxter (1977). A random sample of 25 districts with vocational special needs projects and 25 districts with work study programs (only) were studied. From these districts, 64 students were identified as meeting criteria of graduating in one of the two programs. The results indicated that vocational education graduates had an employability rate of 67 percent compared to 44 percent for graduates of work study programs. The vocational group also earned 53 cents more per hour than the work study group and earned \$729.69 more for the 10-month period from graduation to time of follow-up. There was a significant difference in women's and men's earnings, with men earning 50 cents more per hour and \$22.24 more per week than women. There were not any significant differences in income due to race or level of intelligence. The study did not include a control group or compare the subjects' employment status with the general

populations' employment status. A cost-benefit analysis showed that the cost of vocational education could be justified in the form of increased student income.

Another follow-up study was concerned with the self-sufficiency of EMR program graduates in New Jersey (Kernan, 1979). Ninety-two former students were interviewed with regard to both background academic information and current living/employment conditions. The analysis of the interview information indicated a variety of factors enhanced graduates' adjustment, including (a) type of special education program, (b) I.Q. level, (c) lack of reliance on a benefactor, and (d) involvement in a work study program. The author concluded that work study programs provide a transitional experience between the school and the work world. However, half of the sample functioned at marginal levels of self-sufficiency. The other half of the sample tended to depend on guardians or parents and had a less stable employment history.

The follow-up studies reviewed here represent those that have been accomplished since 1968 in various urban areas. In comparing the studies, this writer found the studies conform to the following descriptors:

(a) define employment/unemployment, but usually in a unique manner; use no uniform occupational measurement.

(b) indicate that the majority of former special education students are employed. The writer's own perspective judges the findings to be good or poor (e.g., 67 percent employed may be a successful figure to one researcher and an unsuccessful figure to another).

(c) were inconsistent in the method of follow-up (i.e., subject choice, questionnaires, years out of school) and in reported research methodology (one researcher stated that a multiple regression procedure was used, then failed to report the analysis or results of the procedure).

(d) conclude that work experience and/or vocational training are beneficial to the EMR student in obtaining and maintaining employment.

The previous conclusions about follow-up studies completed since 1968 reflect the review of follow-up studies completed prior to 1968. Kokaska (1968) reviewed six studies and analyzed them with regard to methodology, procedures, and results. Kokaska found that the studies had several common characteristics, including that the studies

(a) have been conducted in urban areas,

(b) do not explicitly define employment and unemployment,

(c) show that a great deal of vertical or horizontal vocational mobility is possible when students have been given special education and their is economic opportunity within the community, and

(d) were inconsistent in procedures of follow-up.

The 11 studies indicated that many former EMR pupils are employed and that the type of employment ranged from clerical and craftsman to operative occupations. Although the largest percentage of jobs was in service occupations, Kokaska (1968) warned against planning for training programs in this area alone. Since the nation's economic and

social life is in constant flux, the vocational planning for the retarded should include resources and training appropriate to students' abilities and with thought of future trends in the job market.

Vocational Education for Rural
Disadvantaged and/or Handicapped Students

Through the years there has been a quiet but continuous interest in the education of rural American youth. Apparently one of the first peaks of interest in rural education came during the incumbancy of President Lyndon Johnson and his War on Poverty Program. During this period the 1963 Vocational Act was amended. As a result, the 1968 Vocational Amendments provided 10 percent set-aside funds (of the federal dollars sent to the states) for vocational programs for the handicapped and 15 percent set-aside funds for vocational programs for the disadvantaged. This amendment naturally generated concern among vocational educators concerning the procedures for educating handicapped and disadvantaged students. During this period of time rural Appalachians and other groups of disadvantaged people drew the attention of education, vocational rehabilitation, and social welfare agencies. Federal monies were appropriated to support educational, social, and medical services to these disadvantaged rural people (Appalachian Regional Development Act of 1965, P.L. 94-188). Consequently a body of literature was produced that attempted to construct appropriate curricula for rural youth and for rural disadvantaged or handicapped youth (Coppie, Schultz, &

Table 3

Summary of Literature Review of Follow-Up Studies

Author(s)	Subjects	Location	Years out of School	Job Classification	Employment Status Defined	Results/Summary
Baxter (1977)	36 EMR work study graduates; 14 EMR vocational program graduates	Michigan school districts	1	N/A		(1) Voed graduates had an employment rate of 67%. (2) Work study had an employment rate of 44%. (3) Voed graduates earned 53¢ more per hour.
Becker (1976)	40 work study coordinators representing 1438 MR youth enrolled in work study and employed	12 states & Washington, DC	0 (during years 1972-74)	<u>DOI</u>	As "currently employed"	(1) 34% of job placements in hotel/restaurant occup. (2) 13% in bldg. maint. (3) 5% in construction (4) 5% in agriculture.
Brolin, Durand, Kromer, & Muller (1975)	71 former special ed. students (24 former EMR work study; 48 former EMR academic students)	Minneapolis		<u>DOI</u>	(1) % of time employed (2) hours/week (3) job satisfaction	Those receiving work study made a higher level of vocational adjustment than those who had only academics.

Table 3—Continued

Author(s)	Subjects	Location	Years out of School	Job Classifi- cation	Employment Status Defined	Results/Summary
Crain (1980)	150 subjects; 25 from each of 6 EMR graduating classes	St. Louis	1-16	(1) Civil- ian Labor Force or (2) not employed	According to U.S. Govt. Civilian Labor Force	(1) 68% of EMR graduates were classified as being in the civilian labor market (2) 63% earned \$7,000 (\$1,000 above minimum wage)
Halpern (1973)	108 former work study students	Oregon— 14 school districts	1-2	N/A	Author's employment index	MR persons who are assisted by well-struc- tured voed programs have a good chance of finding jobs, regardless of the level of general community unemployment.
Kernan (1979)	92 EMR graduates 1 group w/voed training, 1 group w/work study, 1 group w/traditional academics	New Jersey				(1) Graduates of work study ranked highest in self-sufficiency (2) Graduates of voed training ranked second highest (3) Graduates of academics (only) ranked lowest.

Table 3—Continued

Author(s)	Subjects	Location	Years out of School	Job Classifi- cation	Employment Status Defined	Results/Summary
Lussie, Hanford, & O'Leary (1979)	76 EMR grad- uates of work study programs	Iowa	1-5		Authors' em- ployment index	(1) 69% of subjects were employed (2) most males were con- sidered self-sufficient (3) most females were not self-sufficient.
Mock (1974)	(1) 57 EMR work study graduates (2) 60 EMR tra- ditional program graduates	Orange County, CA	1	<u>DOT</u>		(1) 68% of work study graduates were employed (2) 38% of trad. grad- uates were employed (3) work study graduates earned \$2.55/hr. and trad. graduates earned \$2.13/hr.
Nixon (1973)	505 former EMR pupils	Phila- delphia	5-8	<u>DOT</u>	Employed suc- cessfully for 6 months	(1) 40% males were in service occupations (2) 75% females were in service occupations (3) 78% of total re- spondents were employed (4) 53% were employed for 6 months or more.

Table 3—Continued

Author(s)	Subjects	Location	Years out of School	Job Classifi- cation	Employment Status Defined	Results/Summary
Titus & Travis (1973)	35 EMR work study graduates	Chicago suburb	1-3			(1) 100% of subjects were employed (2) Most male subjects were laborers (3) most female subjects were employed in house- keeping jobs.

Self, 1969; Hamilton, 1967; Hutchinson, 1970; Norton, 1970; Walker, 1971; Young, 1971).

Copple, Schultz, and Self (1969) were among the educators concerned with the habilitation of EMR adolescents in rural areas. To begin the process of determining what constituted habilitation, Copple et al. interviewed school administrators, counselors, EMR students, and parents in 20 rural high schools with respective enrollments of fewer than 110 students. The interviewees were requested to suggest a list of practices, within school curricula, suitable for EMR learners. These practices were then submitted to six special education personnel who rated each practice on a 5-point scale as to suitability. In addition, the special education personnel developed lists of practices for the education of EMR students in intellectual, social, physical, and occupational development. These lists were submitted to parents for rating according to their judgment of practicality. As evidenced in the compilation of these lists the "current" practices were based on those same methods used by urban educators.

The Center for Vocational and Technical Education has sponsored research and vocational development in rural areas for several years. For instance the Center produced a study (Walker, 1971) entitled What Vocational Teachers Should Know About Disadvantaged Youth in Rural Areas, that analyzed the literature dealing with academically disadvantaged rural students. The resulting document included a list of possible reasons for the disadvantaged youth dropping out of school. It also included a list of characteristics of these youth, including

(a) two or more years behind in reading or math at the seventh grade; (b) failure of one or more school years; (c) poor school attendance; (d) performance below potential. In addition, the characteristics of rural academically disadvantaged students, according to the Warsaw Project (Walker, 1971) included (a) lack of motivation to learn or achieve; (b) poor self-image; (c) hostile/aggressive towards authority figures; (d) dependent on others; and (e) short attention span. The author did not indicate how these characteristics were measured, and there was no mention of population or method of assessment. Throughout this document the rural disadvantaged student was referred to as the "slow learner" and basically fits the current definition of the EMR student. The author did not clearly indicate a definition that made the disadvantaged student different from the EMR student. The conclusions of this state-of-the-art indicated that vocational programs must be student, or individually, oriented. Successful programs can be developed if the school staff and the rural community support each other.

Another handbook for vocational educators was developed by Young (1971). This handbook, another result of the concern generated by the 1968 Vocational Amendments, was directed at vocational education for handicapped persons. Chapter Six of the document, "Providing Services in Rural Areas" discusses the four most prominent problems in serving disadvantaged youth in rural areas. These four problems included (a) paucity of handicapped population (for creating class loads to justify teachers/funding); (b) lack of transportation; (c)

lack of placement opportunities (i.e., on-the-job training); and (d) lack of availability of resources and support services (i.e., vocational rehabilitation).

Hutchinson (1970) presented additional information about the population of rural areas. According to a Social Security survey in 1966, demographic data showed that there was a concentration of disadvantaged people in rural areas of the country. In addition, there was a high percentage of disabled people among the rural disadvantaged. According to Vocational Rehabilitation, some of the problems faced in the rural setting were (a) limited on-the-job training opportunities (e.g., mechanization had reduced the demand for farm workers); (b) lack of transportation (geographic isolation); and (c) poor resources (marginal jobs and seasonal employment). It was interesting to note that, according to the 1968 Vocational Rehabilitation Amendments (Vocational Rehabilitation Regulations, Section 402.1) the disadvantaged individual was impaired in the ability to secure or maintain appropriate employment by several reasons including mental disability. The overlap of disability, disadvantage, and mentally handicapped seems to occur in several areas.

Once again, due to the interests generated by the 1968 Vocational Amendments, an institute was held for vocational educators in Fayetteville, Arkansas. Robert Norton (1970) directed the Coordination of Supportive Services for Vocational Education in Rural Areas. One of the major objectives of the institute was to make participants aware of the importance of support services to all students, especially

the disadvantaged and handicapped. The Institute resulted in five task-groups that reported on strategies for improving the coordination of support services.

Hamilton (1967) studied the characteristics of special needs students and aspects of vocational education programs essential to these students. He compared characteristics of nonhandicapped to handicapped ninth grade students. The results of the study indicated there were no significant differences between the two groups of students in terms of race, place of origin, or if the mother worked outside the home. However, there were differences in terms of more boys than girls identified as handicapped. The study also indicated that youth with special needs had lower grades, higher rates of absences, lower reading scores, and lower educational and occupational aspirations than their nonhandicapped counterparts.

The literature shows little rural interest (for general, special, or vocational education) during the years 1971 to 1977. A definite interest seemingly recurred after 1977 and only recently has shown a partial decline due to funding inadequacies.

Contemporary Concerns in Rural Education

The quality of education in rural areas is a major concern of the U.S. Office of Education and the Bureau of Elementary and Secondary Education (Jacobsmeier, 1980). The justification for this concern, aside from philosophical reasons, can be defended by at least two statistical facts. The first fact is that there are 15 million children

(ages 5-17) enrolled in the country's nonmetropolitan schools (U.S. Department of Labor, 1980). Secondly, when looking at the geographical location of school districts, two thirds of all U.S. school districts are located in nonmetropolitan areas. In Florida, 37 out of the total 67 school districts, or 55 percent, are classified as nonmetropolitan (Thompson, 1980).

The current interest in rural education reflects concerns specific to the rural environment. There are many characteristics of rural communities, some varying and some similar. Florida and Alaska rural counties, for example, may have different occupational opportunities and therefore have different vocational training requirements. On the other hand, there are common characteristics of rural communities (Helge, 1981; Rosenfeld, 1980; Sher, 1978). These common characteristics include

- (a) limited educational and employment opportunities;
- (b) inaccessibility of support services (i.e., vocational rehabilitation);
- (c) transportation difficulties;
- (d) low tax base in districts, detracting from ability to provide full services;
- (e) difficulty of recruiting and retraining qualified educational staff;
- (f) distance from centers of commerce and industry;
- (g) deep rooted values and traditions;
- (h) somewhat depressed socioeconomic standards.

Although rural areas may share these common traits, the degree of each trait may differ.

Among contemporary educators urging new rural policy is Cosby (1979) who noted the many barriers facing rural youth. For instance, he cited social and cultural obstacles as affecting or denying achievement to these youth, particularly rural young women and black males. A lack of education and employment is also recognized as a barrier to rural people and Cosby suggests that many negative views of rural people are produced by television and other media. He suggested education should help reduce rural barriers by expanding youths' opportunities for the future. Programs for women, for example, should emphasize the expansion of the career options and consequences of early marriage. According to Cosby, programs for black males should focus on transmitting vocational preferences into actual attainment. He suggested federal monies be expanded to support programs for rural youth.

Cosby (1979) also presented two important demographic facts: (a) the Census estimates that more than 50 million Americans (1 in 4) are classified as rural and (b) the long-run shift from rural areas towards cities seems to have halted. Cosby suggested that there be a strong rural constituency, including rural advocates, to bring greater influence to rural interests and the 25 million American rural youth.

The rural constituency that Cosby describes may already have its beginnings. In a BEH Preliminary Report, Herman (1979) reported the establishment of a Rural Initiative Committee within the Office of

Special Education (OSE, formerly BEH), designed to promote a rural thrust within the Bureau. According to the report, the OSE is concerned over the status of special education service delivery in rural areas. The two goals of the committee included (a) literature review to identify characteristics of rural populations and their effect upon service delivery to handicapped or gifted children in rural areas; and (b) determination of BEH (OSE) commitment and the articulation of strategy directing division effort. Factors acknowledged included (a) the diversity of rural populations and settings, (b) the absence of nationwide rural education studies and data collections, (c) the current population turnaround (city to rural), and (d) the problems of regular rural education and their impact on special education delivery.

Herman also noted that recognition of rural needs and the addressing of problems cannot come from the OSE "down"; instead, programs and committees must be responsive in nature, rather than directive if they are to succeed.

As another response to rural concerns, a Rural Education Conversations Seminar was sponsored by the Department of Health, Education and Welfare and the U.S. Department of Agriculture in 1979. The sponsoring agencies commissioned 29 experts in rural education and sociology to develop recommendations for federal education policies. The recommendations were presented to 100 representatives of rural associations and federal agencies. The representatives discussed issues and developed 26 recommendations into six categories (Jacobsmeier, 1980):

- (a) equity and quality for rural education;

- (b) linking rural development and rural education;
- (c) delivery of services to rural education;
- (d) data collection and research;
- (e) vocational and career training in rural areas;
- (f) energy and rural education.

In order to validate the recommendations, the Bureau of Elementary and Secondary Education sponsored 11 regional Rural Roundtable Discussion Groups in September, 1979. A total of 508 members of the rural constituency participated in this validation effort. As a result, the majority of rural participants agreed with the recommendations. However, regarding federal programs in general, the rural constituency repeatedly stated the desire to maintain local and state control over decisions affecting their rural schools. The group also suggested replacing the categorical nature of federal funding with a general revenue sharing type of assistance, instituting a sparsity factor into the entitlement formula.

Sher (1978) supported the idea of increasing federal monetary support of rural schools and bases his rationale on a demographic platform. For instance, he contended there is a justification for increased federal educational provisions since one-third of the U.S. school population (i.e., 15 million, ages 5-17) are in nonmetropolitan areas. Sher suggested three major sets of goals and outlined specific provisions and activities that could help accomplish these objectives. These three goals are (a) across-the-board rural set-asides and revision of criteria for Title I funding; (b) new rural programs,

rural resource cooperative, rural research construction and renovation; and (c) a national research incentive on rural education which would focus on research, provide technical assistance, and act as an advisory board. Rural communities are concerned that federal and state funds be distributed fairly to rural counties as well as to the larger metropolitan counties. Many people in positions of governmental leadership have a major interest in urban and suburban problems rather than rural problems (Edington, 1980).

Rosenfeld (1980) noted that vocational education issues in rural districts are not simply educational, they are also economic. In this respect, vocational education must offer training that will enhance the development and growth of the rural area. In the past vocational education in these areas was limited to agriculture and home economics programs. With the decline of agriculture nationwide it is necessary for vocational institutions to provide programs which reflect the future occupational trends of the rural area.

The National Center for Research in Vocational Education studied adult and vocational education for the U.S. Department of Education, Office of Vocational and Adult Education. The resulting document Policy Study for Rural Vocational and Adult Education (Mertens, Chafetz, & Nunez, 1981) summarized needs of rural areas, identified legislation that impacts on rural areas, and provided recommendations for improving rural policy. The report indicated that the federal government must be sensitive to certain factors including

- (a) the local autonomy of the rural community must be preserved;

- (b) federal programs must allow for flexibility in the types of programs that are funded;
- (c) acquisition of funds and reporting must be simplified in light of lack of personnel resources;
- (d) funding formulas should be changed; the use of population as a base is unfair to rural areas.

Special Education in Rural Areas

Jacobs (1978) reported a project that the Georgia Department of Human Resources developed for training EMR students in rural areas. A pilot program designed to provide EMR adults sheltered work opportunities in farming and forestry occupations was sponsored by the Georgia Department of Human Resources. Handicapped adults are paid a wage for gleaning wasted crops left behind by mechanical picking and for harvesting other crops. A supervisor, in charge of 10 handicapped adults, negotiated for job wages and hours and helped the adults maintain employment for the entire year. The gainful employment of the retarded adults precipitated several benefits including community acceptance and enhanced self-concept of the workers.

Hayden (1975) reported that work opportunities for handicapped youth in rural areas must be cultivated by school personnel. Hayden cited a rural county in Iowa that provided school employment in order to train students for jobs after graduation. A school team evaluated students and then the parents, students, and school personnel conferred about a potential job. During the student's junior year, he/she worked

in high school for two hours a day and was paid by the school. The student explored a variety of jobs during the senior year and also worked within the community. The school provided the necessary academic subjects and work adjustment counseling for employment. Hayden stated that the students involved in this program became successfully employed after graduation.

A pilot follow-up study was conducted in one rural county in Florida (Schwartz, Hensel, & Westling, 1980). Sixteen former special education students or their family members were located and interviewed. The results showed that 10 of the 16 individuals were unemployed. Of the six individuals who were employed, three were employed on a tobacco farm, one was employed in child care, one was employed on an egg farm, and one person worked full-time as a bag boy in a grocery store. In general, the status of vocational adjustment of the former special education students in this county appeared to be unsatisfactory. The study also noted that the socioeconomic level of the county was somewhat depressed and that vocational opportunities were limited due to lack of business and industry. The authors believed that these socioeconomic factors may influence the postsecondary adjustment of these former students regardless of educational preparation.

In examining the differences between rural and urban environments it becomes evident that an urban model of education is not always suitable to the needs of rural areas. Mertens et al. (1981) reported that career awareness programs, work experience, and career education are all scarce in rural areas. Students lack exposure to a variety

of work environments. The lack of occupational diversity means that few job and on-the-job training opportunities are available.

One recent national study concerned with special education in rural areas was completed by the National Rural Research and Personnel Preparation Project (NRP) (Helge, 1980). This group conducted a national comparative study regarding rural special education delivery systems before and after implementation of P.L. 94-142. Seventy-five rural school districts and cooperatives in 17 states were surveyed by the NRP. One of the achievements of the rural school districts, found by the study, included a 92 percent average increase in the number of handicapped students identified and served. Support services were also added to many school districts, such as physical therapy, occupational therapy, and programs for the severely and profoundly handicapped. There were also data indicating the problems noted a decade ago in rural education were still in existence. Teacher recruitment remains a problem, along with retention problems and funding and staff inadequacies.

The NRP researchers also examined data regarding vocational services for the handicapped. Only 23 percent of the rural local education agencies (LEAs) sampled had vocational training for handicapped students previous to passage of P.L. 94-142. By the 1979-80 school year, 64 percent of the 75 LEAs had implemented some type of vocational education program for the handicapped. Table 4 shows the changes that occurred in the 75 rural school districts regarding vocational programming.

Table 4

Vocational Programs for 16-21 Year Old Handicapped
Students Before and After P.L. 94-142

Program	Before P.L. 94-142	After P.L. 94-142	Percent Change
Special Education Vocational Programs	13%	39%	+200%*
Adapted Regular Education Vocational Programs	39%	57%	+ 46%*
Sheltered Workshops	24%	35%	+ 46%*
No Vocational Services	35%	08%	- 77%*

*Significant to the .05 level.

Despite the increase in vocational education, one of the problems most cited by LEA personnel interviewed by the NRP was lack of appropriate vocational and career education programs for the handicapped. Another predominant concern of interviewees was that lack of appropriate vocational and career education programs in general for handicapped youth contributed to the high drop-out rates. Apparently the special education services in rural areas have greatly advanced as far as identification of special needs of student services and support services. However, the rural handicapped youth may still not be prepared appropriately in a vocation and consequently may not have successful adult adjustment. Jeffords (1980) noted that providing special education services in rural areas is more costly (per capita) and produces an increased burden on the rural school district.

Summary

This review of literature suggests a concern among vocational educators for finding the appropriate instructional materials and methods for teaching rural disadvantaged and/or handicapped students. The 1968 Vocational Amendments apparently helped to encourage this interest, and the concern is evident currently.

A few educators and federal education projects are now focusing on the needs of nonhandicapped and handicapped rural youth. Concerns expressed include funding considerations, appropriate education personnel and program availability in rural areas.

A search for data based literature reflects that there is a paucity of studies aimed at describing and analyzing the special/vocational programs in rural areas. There is also little research describing the postsecondary adjustment of former special education students, and even less research describing the postsecondary adjustment of former special education students in rural areas.

The literature describing follow-up studies of former special education students usually reflects program graduates only. Most follow-up studies (Brolin et al., 1975; Crain, 1980; Lussie et al., 1979; Mock, 1974) do not include those former students who terminated (i.e., drop-outs) their secondary public school education prior to its completion. Consequently, a number of individuals are omitted from the total population of former special education students. The picture of former students in some studies may reflect a higher level of postsecondary adjustment than is probable or typical of the whole

population of former special education students. The present study included students who had withdrawn from high school (after the beginning of the 10th grade but before the completion of the 12th grade) along with those who had graduated in order to provide a more representative sample of former special education students in rural areas. Information regarding this population was deemed important to enhance appropriate educational program planning.

CHAPTER III

METHOD

Introduction

The purpose of this study was to examine the secondary education, demographic background, and occupational status of former mildly handicapped students in rural areas of Florida. This information was used to analyze the relationship between (a) the former students' secondary education and subsequent occupational status, and (b) the demographic background of former students and occupational status. This chapter describes the setting, subjects, procedures, sampling, variables, and data analysis of the study.

Setting

This study was conducted in four rural counties of Florida. The four counties that were chosen had been part of a rural research project sponsored by the Florida Department of Education, Division of Vocational Education. Faculty members of the University of Florida had previously communicated and cooperated with special and vocational education directors from the four counties in pilot and follow-up studies (Schwartz, Hensel, & Westling, 1980).

Each county had been selected on the basis of demographic information contained in the Florida Statistical Abstract (Thompson, 1980) which defines metropolitan and nonmetropolitan (rural) counties. The four counties had some similar socioeconomic characteristics including the following:

- (a) a total county population of less than 50,000,
- (b) a total civilian labor force of less than 16,000 persons,
- (c) more than 19 percent of the population below poverty level (e.g., below \$5,000 annual income per family).

Table 5 provides a comparison of specific socioeconomic features of the four counties; each has been assigned a fictitious name. An analysis of these data indicated that the counties were similar with regard to important demographic variables. For example, in all four counties at least 8 percent of the population received food stamps in 1978. The four counties also reflected the percentage of families below poverty level between 19 and 28.1 percent. In no county did the per capita income exceed \$6,629 annually.

Subjects

The subjects were from the four selected counties and all had been former public school students. Each participant was included in all parts of the study and had met the following criteria:

- (a) was classified as EMR, SLD, or ED during grades 9-12.
- (b) completed at least one year of vocational or prevocational training during grades 9-12.

Table 5
Comparison of Socioeconomic Features of Counties

Socioeconomic Features	Francis*	Ellis*	Morgan*	Duke*
1. Total Population	42,397	48,268	19,881	20,879
2. Population of County Seat	3,398	9,247	4,134	7,463
3. Personal Income per Capita	\$4,969	\$6,629	\$4,934	\$5,454
4. Civilian Labor Force (1978)	15,180	14,932	6,475	7,733
5. Employment (1978)	14,260	13,732	5,976	7,310
6. Unemployment (1978)	920	1,200		423
7. Unemployment Rate (1978) (%)	6.1	8.0	7.7	5.5
8. Labor Force Growth from 1973-1978 (%)	24	27	38	01
9. Families below Poverty Level (%)	19.2	19.0	19.6	28.1
10. Families Receiving Food Stamps (1978) (%)	8.1	8.8	9.8	7.8

*The county names are fictitious.

Source: Thompson, R. B. (Ed.). Florida statistical abstract, 1980.
Gainesville, FL: The University Presses of Florida,
1980.

- (c) was not temporarily placed in the school (e.g., entering or withdrawing the same year).
- (d) completed at least the entire ninth grade and part of the tenth grade.
- (e) completed at least one year at the school from which the student had graduated or withdrawn.
- (f) was living in the county at the time of the study.
- (g) had a current address and/or phone number or family member with a current address and/or phone number.

The researcher contacted 113 former students and/or former students' relatives (i.e., parent, grandparent, brother, or sister). There were 40 females and 73 males; 64 were black and 49 were white. Seventy-nine (69.9 percent) of the students completed the 12th grade, 12 (10.6 percent) completed through the eleventh grade, 15 (13.3 percent) completed through the tenth grade, and seven (6.2 percent) completed through the ninth grade. Two of the former students had been classified as emotionally disturbed, 29 were classified as specific learning disabled, and 82 former students were classified as educable mentally retarded. The mean age of the former students was 19.6 years; the mode was 19.0 years, and the median was 19.1 years. The demographic information is presented in Table 6. Included in this table are data regarding the sex, race, and highest grade completed by the students; data are also presented on the age of student and special education classification of the students.

Table 6
Demographic Data

Sex of Student	Number	Percentage
Female	40	35.4
Male	73	64.6
Total	113	100.6
Race of Student	Number	Percentage
Black	64	56.6
White	49	43.4
Total	113	100.0
Highest Grade Completed	Number	Percentage
Grade 9	7	6.2
10	15	13.3
11	12	10.6
12	79	69.9
Total	113	100.0
Mean:	11.4 years completed	
Median:	11.8	

Table 6—Continued

Age of Student	Number	Percentage
16 years	1	.9
17	2	1.8
18	16	14.3
19	40	36.0
20	28	25.2
21	17	15.3
22	8	7.2
Total	113	100.0
Mean:	19.6	
Mode:	19.0	
Median:	19.1	

Special Education Classification	Number	Percentage
Emotionally Disturbed	2	1.8
Educable Mentally Retarded	82	72.6
Specific Learning Disabled	29	25.7
Total	113	100.0

Data Collection

Procedures

Entry into the counties. In order to obtain permission to enter the school districts of the rural counties, an introductory letter was sent to the school superintendent in each county. The letter explained the purpose of the proposed study, the benefits, including improvement of educational program planning, and the planned methodology of the study. Also included was a request for permission to conduct the research in that particular county, which was followed up by a telephone contact to each district school superintendent. After each school superintendent had given permission for the researcher to enter the county, other school district personnel were contacted in the same manner. A letter, similar to the one sent to the school superintendent, was sent to both the special education director and the vocational education director, with a request for a time to meet with each director in person. A meeting with the individuals was scheduled and a more detailed explanation of the study and samples of the forms and questionnaires to be used were shared.

Instrumentation. Several forms were prepared for use in this research. One form was used to record the names of former special education students as provided by the special education director or high school guidance counselor (Appendix A). Another form was developed to enter information from the former students' cumulative folder (Appendix B). This form was used to record such information as special education classification, vocational course credits (grades 9-12), and

academic achievement scores. A third form (questionnaire) was used to record previous and past employment information about former students (Appendix C); this employment questionnaire was used to record employment position, salary, and length of time employed.

Sampling. The special education directors introduced the researcher to the guidance counselor in each high school. The guidance counselor provided the cumulative folders for the former students listed by the special education director. As the information for each student was examined by the researcher, former students who did not meet the criteria (see pages 45-47) were deleted from the list of subjects. If the total number of qualified subjects exceeded 50, the researcher randomly selected 40 from the total.

In the case of Ellis County, 100 former students qualified as subjects, so 40 were randomly chosen as subjects. Of the 40, 29 former students were located, 11 others had moved or could not be located. In Francis County, 38 former students qualified as subjects; 34 were located and four had moved from the county. Morgan County had 35 former students as qualified subjects; 28 were located and seven had moved from the county or could not be located. Duke County had a total of 34 qualified subjects; 22 were located and 10 could not be located.

Academic and demographic information. After discussing the project in detail, permission was obtained from the guidance counselor to examine the former students' cumulative folders. The information from cumulative folders was recorded on a form (see Appendix B) and all names were coded to ensure anonymity. A letter was placed in each

cumulative folder stating that the information was extracted for research purposes only; the letter also included the researcher's name, address, phone number, and date used. The researcher used the cumulative folders in the guidance office and returned them to a student assistant or to the school vault. The following information was obtained:

1. date of school termination;
2. reason for school termination, according to school records;
3. special education program titles, grades 9-12;
4. vocational education course titles, grades 9-12;
5. math achievement score, test name, and date administered;
6. reading achievement score, test name, and date administered;
7. last known address and phone number;
8. name of parent or guardian;
9. number of days absent during last year of school; and
10. number of months out of school.

Employment information. The researcher attempted to locate each of the qualified former special education students in each county. The researcher used an area map purchased from the Chamber of Commerce to locate students' homes. In some cases, former teachers of the respective students were able to assist in locating students. If the students or the students' parent had a current telephone number, the interviewer used that method of interviewing. The interviewer followed a structured form (Appendix C) when obtaining information about the subject. Whenever the subject was unavailable for the interview, a family member was interviewed.

The researcher explained the reason for the interview (i.e., a follow-up study of former students of the local high school) and then explained that their participation in the study was voluntary. If the subjects agreed to participate, the interview followed. The subject was identified by a code number to ensure anonymity. The researcher explained to the participant that the information was only to be used for research purposes and that the individual name and/or any identifying information would never be published.

The following information was obtained:

1. Current employment status (i.e., full-time, part-time, homemaker, unemployed).
2. Position (i.e., construction worker, short order cook).
3. Length of time on the job (months).
4. Salary (per hour or per week).
5. Previous employment status (i.e., full-time, part-time).
6. Previous position.
7. Previous length of time on the job.
8. Previous salary.

It was also noted if the student was not employed, but was a student in Job Corps, vocational-technical school, or community college. Students were also classified as homemakers or member of the armed forces. It was also noted if the former student spent time in prison.

Definition of Variables

In order to determine how to quantify the past and current employment status of the former students, previous follow-up studies of postsecondary handicapped students were reviewed. Several studies used the U.S. Bureau of Labor methods (Crain, 1980; Titus & Travis, 1973); one study by Halpern (1973) was useful in determining a formula for measuring employment.

Halpern (1973) randomly sampled the former special education students (EMR) of 14 school districts in Oregon. The former students were composed of two groups of 47 and 57 people, respectively. The students had been out of school one year. All interviews were conducted in person with information being collected on demographic, social, and vocational variables. The follow-up measured actual employment of students who had received a cooperative work study curricula. Thus employment was also compared with the general community employment. An employment index was constructed in order to measure the work history over the 12 month period. The index (Halpern, 1973) was defined as

$$\text{Employment Index} = \frac{A + B/2}{C}, \text{ where}$$

A = Total months of full-time employment over a 12 month period.

B = Total months of part-time employment over a 12 month period.

C = Total months in the labor market over a 12 month period.

In order to add clarity, the index was amended in the following manner:

$$\text{Employment/Training Index} = \frac{F + P/2}{O - S}, \text{ where}$$

F = Months of full-time employment.

P = Months of part-time employment.

O = Months out of school.

S = Months enrolled in postsecondary education.

Information from each former student's employment questionnaire was inserted into the index formula. For example, a student who had been out of secondary school 18 months, had worked full-time for 10 months and had worked part-time for four months had an employment index of 12/18 or 66 percent. The result of the index (expressed in a percentage from 0-100) was the dependent variable (Y) for each former student; it was considered a measure of postsecondary employment and training history.

In order to validate the adapted Halpern employment index (Halpern, 1973), the researcher compared the results of the index (per subject) with another adult adjustment measurement. The rationale for this measurement was based on several tested indicators. One three-level indicator was developed by Brolin, Durand, Kromer, and Muller (1973) for use in a follow-up study. Brolin et al. randomly selected 80 former special education students from a group of 400 former special education students attending Minneapolis high schools between the years 1966-1972. The study identified (a) percentage of employment since school termination, (b) hours worked per week, (c) salary, and (d) job

satisfaction as the components of adult adjustment. The degree of each of the items determined the three degrees of adult adjustment (average or better, fair, poor).

One commonly used descriptor of type and level of employment is the six digit job number code of the Dictionary of Occupational Titles (DOT) (1977). The six digits categorize a job as being skilled, semiskilled, or unskilled. Part of the Brolin et al. (1973) employment level description was combined with job level (according to the DOT code) to define employment status in the following two ways:

- A. Employed Successfully
 - 1. \$134.00 (minimum wage) per week or more in wages
 - 2. skilled or unskilled employment
 - 3. consistent (e.g., nonseasonal) employment
- B. Underemployed
 - 1. less than minimum wage earnings
 - 2. unskilled employment
 - 3. seasonal employment

This information became the second dependent variable and was called the Adult Vocational Adjustment (AVA) variable. This dependent variable was used to validate the first dependent variable, the Employment and Training Index (ETI).

Data Analysis

Descriptive Statistics

The nature of this study was essentially descriptive and included academic background information and follow-up data concerning former

handicapped students in four rural counties. As such, descriptive statistics were useful in presenting the data collected. Specifically, a table of descriptive statistics was compiled to address the following questions about each former student:

1. The average years of school completed by the former student.
2. The frequency of special education classification of former students.
3. The average of prevocational and/or vocational courses (credits) completed by former students.
4. Average standardized reading comprehension score and math application score of the former students.
5. The frequency of employment status of the former students (full or part-time, unemployed, homemaker, student, incarcerated)?
6. The average months, hours per week, and salary of the former students.
7. What was the student's prior employment history?
8. Mean age of subjects.
9. Mean Employment/Training Index for students.

For additional individual and group descriptive statistics, refer to Appendix D.

Correlational Analysis

Selected independent variables included in the demographic data about the former students were compiled for further analysis. The following factors were considered important:

1. Special education placement
2. Age
3. Sex
4. Race

Each of these factors was used to prepare comparative tables with regard to the Employment Training Index. Additionally, the relationship between the Adult Vocational Adjustment and these selected independent variables was of interest.

A step-wise multiple regression analysis in which the Employment Training Index was predicted from special education classification, years of school completed, vocational coursework, reading level, and mathematics level was performed. The regression techniques determined the following information:

1. Was there any relationship between the former students' classification (EMR, SLD, or ED) and their employment adjustment?
2. Was there any relationship between years of school completed and employment adjustment?
3. Was there any relationship between the prevocational and/or vocational preparation of the former students' and their occupational adjustment?
4. Was there any relationship between the achievement levels in reading comprehension and math application and the students' occupational adjustment?

A display of these comparative analyses can be found in Appendix E.

Summary

One hundred and thirteen former special education students from four rural counties in Florida were studied. The investigation was concerned with selected demographic, educational, and employment factors of the subjects. The data were collected directly from the subject (or family member) and from the subjects' academic records. This data were analyzed in the form of descriptive statistics and correlational statistics. These results are presented in Chapter IV.

CHAPTER IV

RESULTS

Introduction

The purpose of this study was to determine what educational variables were predictive of occupational success for mildly handicapped young adults. Demographic, academic, and employment information was obtained for 113 former mildly handicapped students in four rural counties of Florida. Two forms of analysis were used to determine the relationship between educational variables and employment status and demographic variables and employment status.

This chapter presents descriptive statistics regarding the characteristics of the former students. Correlational statistics are presented answering the series of questions presented in Chapter III.

Descriptive Statistics

Academic Variables

A number of demographic, academic, and employment questions were addressed for each of the 113 former students. Descriptive statistics were used to present this information and are found below in narrative and table form.

Because this study included subjects who graduated or withdrew from high school it was of interest to determine the average number of years of school completed by the former students. The mean highest grade completed was 11th grade. The frequency per grade was tabulated and showed that the majority (69 percent) of subjects finished the 12th grade, completing their secondary education. Table 7 presents information about highest grade completed.

Table 7
Years of School Completed by Subjects

Highest Grade Completed	Number	Percentage
Grade 9	7	6.2
10	15	13.3
11	12	10.6
12	79	69.9
Total	113	100.0
Mean:	11.4 years completed	
Median:	11.8	

The frequency tabulation for special education classification showed the majority of former students (72.6 percent) had been labeled educable mentally retarded (in some counties, educable mentally handicapped). Of 113 former students, only two had been labeled emotionally

handicapped. In most cases, former emotionally handicapped students had not been included in vocational education and consequently did not qualify as subjects. Table 8 presents this information.

Table 8
Special Education Classification of Subjects

Special Education Classification	Number	Percentage
Emotionally Handicapped	2	1.8
Educable Mentally Retarded	82	72.6
Specific Learning Disabled	29	25.7
Total	113	100.0

The standardized achievement scores reported in the academic folders reflected the following measurement instruments: The California Test of Basic Skills (CTBS), The Peabody Individual Achievement Test (PIAT), The Wide Range Achievement Test (WRAT), The Woodcock Reading Mastery Tests, and The Key Math Diagnostic Arithmetic Test (Key Math).

Ninety-nine former students had recorded reading and math achievement scores. The mean reading grade level for these subjects (all tests) was 3.8 and the mean arithmetic application grade level was 4.4. A breakdown of individual tests is presented in Table 9.

Table 9

Reading and Mathematics Achievement Grade Level of Subjects
by Individual Standardized Achievement Test

Achievement Grade Level—Reading			
Test	Mean	SD	Number
Woodcock	2.8	.79	7
WRAT	3.6	1.6	57
CTBS	3.9	2.1	24
PIAT	5.6	3.2	11
All Tests	3.8	2.0	99

Achievement Grade Level—Mathematics			
Test	Mean	SD	Number
Key Math	3.5	.42	7
WRAT	3.9	1.2	57
CTBS	4.1	2.3	24
PIAT	7.5	3.6	11
All Tests	4.3	2.2	99

The average total prevocational and vocational credits completed by the former students was 4.4 credits. It should be noted that this value was derived from a total of 11 courses (four prevocational, seven vocational). A breakdown of the credits per course earned by the 113 former students shows that the average number of credits per course was less than 1.0.

Table 10 indicates that the mean credits for only four courses (prevocational home economics, prevocational industrial arts, vocational home economics, and vocational work experience) were over one-half of one credit per course. Values such as these indicated that despite support by special education and legislation for vocational training for mildly handicapped students, that training is not being emphasized in these rural schools. Table 10 presents the mean number of credits for individual prevocational and vocational coursework. Additional academic information is found in Appendix D.

Employment Variables

A major concern of this study was the current employment status of the former students. The subjects were classified as employed (part-time, full-time), unemployed, homemaker, armed service member, student, or incarcerated. At the time of the study, 50 subjects (44.2 percent) were employed full-time, 20 (17.7 percent) were unemployed, 15 (13.3 percent) were full-time students (i.e., Vo-Tech, Job Corps), 13 (11.5 percent) were homemakers, 8 (7.1 percent) were employed part-time, and 4 (3.5 percent) were members of the armed services.

Table 10

Mean Number of Credits for Individual Prevocational
and Vocational Coursework

Prevocational/Vocational Credits	
<hr/>	
Mean of Total Credits	4.4
Mean of Credits Per Course	.55
Mean of Individual Course Credits:	
1. Prevocational Agriculture	.24
2. Prevocational Home Economics	.70
3. Prevocational Industrial Arts	.56
4. Prevocational Workstudy	.49
5. Vocational Agriculture	.37
6. Vocational Business Education	.09
7. Drafting	.27
8. Home Economics	.55
9. Mechanics	.27
10. Health Occupations	.10
11. Work Experience	.75

Of the 67 subjects employed, 34 had been on the job for at least 12 months. The salary range for these 67 subjects was from \$25.00 per week to \$250.00 per week. Twenty subjects (30 percent) earned minimum wage, \$134.00 per week. The majority of subjects employed (41 or 61 percent) worked 40 hours per week.

A second concern regarding the subjects' occupational status was previous employment. Because the study investigated those former students that terminated their secondary education in the past three years, not all 113 subjects had previous employment. Those subjects, for example, who were in postsecondary school or had maintained one employment situation since school termination did not have a prior employment history. Forty subjects (35.4 percent) had no previous employment history.

Thirty-one (42 percent) had been full-time employees and 23 (32 percent) were unemployed. Thirty-three worked 40 hours per week and the salary for the subjects' previous employment ranged from \$62.00 per week to \$198.00 per week. Twenty-two subjects (30 percent) earned minimum wage. Descriptive statistics regarding current and previous employment history are presented in Table 11.

Employment Training Index

The mean Employment Training Index (ETI) for the population (after deleting homemakers) was 57.6 percent. This value reflects a range of 114; the minimum ETI was 0.0 and the maximum ETI was 114 percent. The maximum 114 percent score represented a student who, at one point, maintained both full-time and part-time employment.

Table 11
Descriptive Statistics Regarding Current and
Previous Employment History of Subjects

Current Employment Status		
Status	Number	Percent
Employed Full-Time	50	44.2
Employed Part-Time	8	7.1
Full-Time Student	15	13.3
Homemaker	13	11.5
Armed Forces	4	3.5
Unemployed	20	17.7
Incarcerated	3	2.7
Total	113	100.0
Months Currently Employed		
Months	Number	Percent
Zero	46	40.7
One to Eleven	33	29.2
Twelve to Twenty-four	26	23.0
Twenty-five to Thirty-four	8	7.1
Total	113	100.0
Mean:	7.7 months	
Range:	34 (0-34) months	

Table 11—Continued

Current Employment—Hours Per Week		
Hours	Number	Percent
Zero	55	48.7
Eight to Twenty-four	5	4.5
Twenty-five to Forty	44	39.7
Fifty to Sixty	9	8.1
Total	113	101.0
Mean:	20.3 hours	
Range:	60 (0-60) hours	

Current Employment—Salary Per Week		
Salary	Number	Percent
Zero	56	49.6
\$25.00 - \$128.00	7	6.3
\$134.00	20	17.7
\$150.00 - \$170.00	13	11.5
\$180.00 - \$200.00	10	8.0
\$207.00 - \$250.00	7	6.3
Total	113	99.9

An ETI approximating the mean of 57.6 percent might be attained several ways. For example, a person who had been out of school 12 months and had worked full-time for six months would have an ETI of 50 percent. Another student who was out of school for 10 months, had been unemployed for four months, then was enrolled full-time at Job Corps for six months would have an ETI of 60 percent. A third student who had been out of school for 20 months, had been employed part-time for six months, and full-time for nine months would have an ETI of 60 percent.

A frequency breakdown of the ETI shows that over half of the 94 subjects "in the job market" (excluding homemakers) were employed for at least 51 percent of the time since school termination. Table 12 presents the ETI for the 113 subjects.

Table 12
Employment Training Index for Subjects

ETI	Number	Percent
Homemakers	19	16.8
0 - 25	29	25.7
26 - 50	12	10.6
51 - 75	11	9.7
76 - 100	40	35.4
113	01	.9
114	01	.9
Total	113	100.0

Correlational Statistics

The Employment Training Index (ETI) was the primary dependent variable in this study. Comparative statistics were used to examine the relationship between ETI and selected independent variables.

Comparative tables were prepared with regard to the Employment Training Index and certain demographic variables. The relationship between special education placement (i.e., SLD, EMR, or ED) of former students and their ETI was not significant according to coefficient correlation procedures. However, a breakdown procedure between special education placement and ETI indicated that subjects who were formerly classified as SLD had a higher ETI than other subjects. According to coefficient correlation procedures sex, age, and race were not significant factors influencing the subjects' ETI results. Table 13 presents these correlation coefficients. Additional data are presented in Appendix E.

Table 13
Pearson Correlation Coefficients

	Sex	Race	Age	SpEd
ETI	-0.28	.07	.10	-0.31
	P = .003	P = .24	P = .16	P = .001

The relationship between ETI and Adult Vocational Adjustment (AVA) was also of interest. Correlation procedures between the two dependent variables indicate a positive relationship between the two. For example, higher ETI figures correspond with higher AVA results. Tables presenting statistics between these two variables are found in Appendix E.

The relationship between the dependent variable ETI and certain academic independent variables were examined by using regression analysis. The researcher was interested in the predictive value of the following independent variables: highest grade completed, cumulative prevocational and vocational coursework, reading level, and mathematics level.

A step-wise multiple regression analysis was completed using those four independent variables with the ETI. The regression analysis determined that the best predictor of ETI was the highest grade completed. The relationship between ETI and highest grade completed was .35; 12 percent of the variance in the ETI could be attributed to the highest grade completed. A second predictor of ETI was mathematics level which increased the multiple R to .43; mathematics level was responsible for approximately 7 percent of the ETI variance. A third, weak, predictor was reading level which had a relationship with ETI of .45 accounting for less than 2 percent of the ETI variance. Regression analysis indicated that vocational coursework was not a predictor of the Employment Training Index.

Table 14 presents the regression analysis summary. Additional correlation tables concerning these variables are presented in Appendix E.

Table 14
Regression Analysis Summary Table

Dependent Variable: ETI			
Independent Variable	Multiple R	R ²	Change
Highest Grade Completed	.350	.12	.122
Mathematics Level	.438	.19	.069
Reading Level	.455	.20	.014

The researcher examined a number of demographic, academic, and employment variables for each of the 113 subjects. These data are presented in Appendix F.

Summary

Descriptive and correlational statistics were used to examine variables regarding subjects' demographic, academic, and employment characteristics. Descriptive statistics were used to define the total population and to compare independent and dependent variables. Correlational statistics were used to illustrate the relationships between variables and to test for significance between variables.

Descriptive statistics indicate that most of the former special education students completed the twelfth grade. These statistics also indicated the mean Employment Training Index was 57.7 percent. Correlational analysis did not show a significant relationship between ETI and sex or race. One correlational analysis showed no relationship between ETI and special education placement; a descriptive analysis indicated that special education placement is related to ETI. Regression analysis indicated that highest grade completed is predictive of ETI; mathematics level and reading level were also shown to be predictive, but at a much lower figure. Correlational analysis showed that vocational coursework was not predictive of the Employment Training Index.

Chapter V contains further discussion of the findings of this study. Additionally, conclusions and implications derived from the study are presented.

CHAPTER V

DISCUSSION

Summary of the Study

The purpose of this study was to determine what educational variables were predictive of the occupational status of mildly handicapped youth in rural areas. A total of 113 subjects, formerly labeled mildly handicapped, were studied with regard to demographic, academic, and employment characteristics. The raw data were used with descriptive statistical measures to describe the population and to analyze certain variables. Correlational statistical measures were used to investigate the relationship between the dependent variable (employment status) and several independent variables.

The Employment Training Index (ETI) measured the subjects' employment status and was the dependent variable. This variable was expressed in percentage form from 1 to 100. The Adult Vocational Adjustment (AVA) variable was used to verify the ETI. The AVA was expressed as either (a) successful employment or (b) underemployment.

The independent variables included demographic information such as age, sex, race, and months out of school. Independent variables in the academic domain included special education classification, number

of prevocational credits, number of vocational credits, days absent during last year of school, reading level, and mathematics level.

Discussion of Independent Variables

The demographic and academic data were independent variables.

These variables included:

- Age,
- Sex,
- Race,
- Months out of school,
- Special education classification,
- Prevocational course credits,
- Reading level, and
- Mathematics level.

These data were obtained from individual students' academic or cumulative folders. The researcher did not consider I.Q. or elementary or middle school coursework (i.e., K-8) as variables. The academic or cumulative folders, in most cases, were complete. However, only two of the four counties included number of days absent in the students' record. Consequently days absent was not used as an independent variable in the study.

A third of the former students withdrew from high school prior to completion of twelfth grade. A review of the withdrawal forms indicated that, in most cases, there was no recorded exit interview. The reason for school termination was usually noted only if the student had been required to leave school because of discipline problems. Each of two

high schools in one rural county had an occupational specialist. These specialists were in charge of following-up all former students of their respective schools with regard to employment status. One of the specialists provided the researcher with information on some former special education students. However, both specialists indicated that few former special education students return employment follow-up questionnaires that are mailed to former students annually. Upon examination of the follow-up questionnaire, the researcher noted the complexity of the form and of its language. These two factors are an inhibiting factor as former EMR and SLD students attempt to respond to the follow-up.

The researcher spoke informally with special education directors and special education teachers in the four counties about follow-up procedures. In all four counties, only one teacher kept postsecondary records of her former students. This teacher, a special needs vocational educator, had been trained in the follow-up procedure in undergraduate home-economics coursework. No other special needs teacher kept follow-up records.

Most students had an achievement test recorded in their cumulative, academic, or special education file. Students often had only one recorded test score during secondary education and that was usually the Wide Range Achievement Test (WRAT). The WRAT purports to measure reading, spelling, and arithmetic in three subtests. The most serious criticism of the test, according to Salvia and Ysseldyke (1979), is its limited and doubtful normative population plus its limited range of

sampled behaviors. The authors also warn against making curricular and program planning decisions based on this test; yet most of the subjects had only this test record in their file. Part of the population of this study received the majority of their education prior to the full implementation of P.L. 94-142. Future follow-up studies may reflect improvement in this method of measurement for special education students.

The Peabody Individual Achievement Test (PIAT) was used to measure performance level in only a few cases. The mean reading and mathematics grade level for the PIAT reflected higher scores than any other measure (Appendix F). The comprehension of this measure is pictorial and spatial. This type of presentation could account for higher scores of the former students who received this test (Algozzine & McGraw, 1979).

As noted earlier, subjects must have completed at least one year (or one credit) of prevocational or vocational education. Records for some subjects had complete academic information with the official name of the course, number of credits, and year in which the credits were earned. Other academic records produced skimpy course titles (e.g., "foods," "prevoc"), little or no information reflecting credits earned, and no date (semester or year). For these cases, the researcher questioned former teachers and/or the former students to determine course titles, credits, and dates.

Discussion of Dependent Variables

Several teachers of the former students were willing to provide assistance in locating the subjects' home or job. The researcher met

with each of the 113 subjects, or a relative living in the subjects' home, in person or by telephone. A structured questionnaire was followed to collect specific information about the subjects' employment history. Variables of interest included current employment status, position title, hours worked per week, salary earned per week, and number of months on the job. Previous employment history with parallel information was also collected using the questionnaire. All of the interviews were pleasant and the subjects willingly provided information.

The results of the employment history questionnaire were used to determine each subject's Employment Training Index (ETI). This index expressed the percentage of time the subject had been employed since school (secondary or postsecondary) termination. The mean ETI for the entire population was also calculated. The ETI was based on the formula developed and tested by Halpern (1973). To confirm the validity of this index, another measure of employment was developed and compared to the ETI. This additional measure, the Adult Vocational Adjustment (AVA), became the second dependent variable. The AVA had two levels

- (1) successful employment, including salary minimum wage or above, full-time employment, and nonseasonal employment.
- (2) underemployment, including salary below minimum wage, part-time employment, and seasonal employment.

A review of individual ETI and AVA indicated a positive relationship between the two dependent measures.

The results of the employment questionnaire showed a wide range of salaries earned by the former students. Some students were unpaid full-time workers on family businesses. Others were full-time employees

earning \$250.00 per week. Although no subjects held professional positions, several were studying vocational professions in Job Corps or area vocational technical schools. Some students, despite graduation from high school, were indefinitely unemployed.

The mean ETI for the whole population was 56.6 percent. A breakdown of the ETI showed that over half of the 94 subjects "in the job market" (excluding homemakers) were employed for at least 51 percent of the time since school termination. Analysis of the incomes earned by the subjects discloses that 50 former students made minimum wage or above. In addition, several homemakers had children, an employed spouse, and their own home. These data support the notion of an academic handicap as opposed to a functional handicap. Most of the former students performed below grade level in their school environment. Yet many of these same individuals obtained and maintained competitive employment and functioned successfully within their own home and community.

Discussion of Descriptive Statistics

A review of the descriptive statistics concerning the characteristics of the 113 subjects revealed a varied and motley population. The range of prevocational and vocational credits per pupil, for example, ranged from one to 16. Calculations showed the population was composed of an almost equal number of black and white, male and female subjects. Special education classification, however, showed the majority of students as formerly labeled educable mentally handicapped. This does not necessarily indicate that there are more EMR students than other handicapped students in rural counties. Instead, it indicates that EMR students are more often placed in prevocational and vocational courses

than other special education categories. Reading level and math level means indicated that the former students were functioning well below grade level during their secondary education.

Discussion of Correlational Statistics

The results obtained from the correlational analysis suggested that few educational variables are predictive of adult employment status for formerly labeled mildly handicapped students. Prevocational and vocational education credits, for example, are not predictive of occupational success. However, the descriptive statistics also clearly showed that the mildly handicapped students received little vocational training. According to the Florida State Plan for Vocational Education (Florida Department of Education, 1981), vocational education is instruction directly related to the preparation of an individual for employment. It seems logical that the small amount of vocational training received by the subjects would not be influential in attaining skilled employment.

Correlational statistics also indicated that age, sex, and race are not significantly related to employment status. The statistical results were somewhat inconclusive as to the relationship between special education placement and employment status. One correlation showed no differences between EMR, LD, and ED postsecondary employment status. Another statistical process showed the LD student attained a higher ETI percentage. A scan of the raw data (Appendix F) shows that the former LD student makes a higher salary than the former MR or ED student. However, in several cases, the former LD student was employed by a prosperous family-owned business. It would be incorrect to assume

that the training the subject received in high school, or his/her special education classification were responsible for the difference in salary.

Multiple regression techniques performed between employment status and independent variables showed predictive worth of some academic factors. Highest grade completed by the former students was predictive of employment status. Mathematics achievement was also considered predictive of employment status. Other academic variables (e.g., vocational credits) were not significantly predictive of employment status.

Comparison of Studies

This study was different from previous postsecondary follow-up studies because it described former students in rural areas. Although 67 percent of all American school districts are located in rural areas, little data have been collected reflecting education in these areas. Most follow-up studies such as those cited in Chapter II traditionally describe former students in urban areas. This study reflects the employment adjustment of former students living in sparsely populated areas which have limited industrial and social service resources.

The procedures of the other follow-up studies deal with graduates of work study and traditional special education programs. This study describes former students who graduated or withdrew from secondary education.

Additionally, this study presents the amount of prevocational and vocational education received by former special education students. Most other follow-up studies consider the former students' membership

in special education and/or vocational programs. However, the studies did not calculate the number and type of vocational credits.

In terms of statistical analysis, this study used correlational and descriptive measures. The correlational and regression procedures were used to determine what educational variables were predictive of employment status. Most of the studies mentioned in Chapter II describe results in terms of percentages only and do not use statistical measures with their data.

Limitations

In all 113 cases the interviewees were willing to give information. One limitation of the study is that some subjects or subjects' relatives sometimes had difficulty in describing the job. For example, one subjects' mother proudly stated that her son worked at Goldkist. When queried as to his position there she responded that he did a little of this and a little of that. The researcher was able to determine (in this situation) the position title by talking with Goldkist personnel. This was not always possible. It is credible that subjects may have described their employment position in simpler terms than those positions deserve.

Seasonal work provides employment for many rural youth. This type of employment is difficult to quantify, however. The season for citrus may begin in October and end in July; it was not always possible for subjects to determine exactly how much of that time they had worked. Additionally, payment for citrus labor varies from \$4.00 per bin to

\$6.00 per bin and a laborer can collect from three to 10 bins per day, depending on his/her desire to produce. Consequently, wages for seasonal workers in this study were averaged, based on advice from citrus grove owners. This average does not reflect exactly what some of the subjects earned.

Another characteristic of seasonal work in some parts of Florida is that it can continue all year. For example, workers may be employed eight months of the year in the citrus industry and employed for three to four months in the vegetable or nursery plant production. This labor might actually provide an adequate income.

Recommendations

The results of this study provide some evidence for future recommendations for the secondary education of rural handicapped youth. For example, academic and cumulative records reflect the need for more diagnostic achievement tests recording the students' present level of performance.

A system for listing prevocational and vocational courses, credits, and dates is also needed in some counties. Accountability procedures will no doubt encourage this activity in the future.

Follow-up procedures are needed to help assess the value of the education received by special needs students. The university preservice teacher education core should present the simple procedures necessary for follow-up. Follow-up results allow the teacher to continue planning educational programs suitable to the needs of the mildly handicapped student in his/her environment.

For those schools whose occupational specialist already attempts follow-up procedures, another recommendation is made. The vocational follow-up form (standardized by the State of Florida) should be simplified both in form and content for readability by special needs students. This may only involve rewriting the questionnaire informally, and making copies for formerly labeled handicapped students.

Although the value of work study has been widely accepted in special education, not all of the former students were involved in this activity. However, the two counties that did not have work study had concrete plans for implementing a work study program during 1981-82. This study's findings (in those two counties) can provide the basis for a comparative follow-up study during 1983-84.

This study supports more systematic program planning for providing vocational training to special needs secondary students. This planning should also include special education curricula that will develop entry level skills so that students will qualify for and remain in vocational classes.

The results of this study show that some of the former students are underemployed. In other words, despite training and education, subjects were not working up to their ability level. This situation demands that special education personnel and vocational education personnel cooperate in locating employment and placing students in jobs.

The current job market is fast changing and competitive. Mildly handicapped students must receive the appropriate training and guidance in secondary education so that they are prepared to enter this job market.

REFERENCES

- Algozzine, R., & McGraw, K. Diagnostic testing in mathematics: An extension of the PIAT? Teaching Exceptional Children, 1979, 12, 71-77.
- Alley, G., & Deshler, D. Teaching the learning disabled adolescent: Strategies and methods. Denver: Love, 1979.
- Baxter, J. M. Comparison of vocational education and on-the-job training as methods of improving post-school employability of the educable mentally retarded (Doctoral dissertation, Michigan State University, 1977). Dissertation Abstracts International, 1978, 55, 2081-2082A. (University Microfilms No. 88-15, 429)
- Becker, R. L. Job training placement for retarded youth: A survey. Mental Retardation, 1976, 14, 11-17.
- Boyan, C. A flexible approach to career development: Balancing vocational training and training for independent living. Education and Training of the Mentally Retarded, 1978, 13, 209-212.
- Brolin, D. Life centered career education: A competency based approach. Reston, VA: The Council for Exceptional Children, 1978.
- Brolin, D., Durand, R., Kromer, K., & Muller, P. Post secondary school adjustment of educable mentally retarded students. Education and Training of the Mentally Retarded, 1975, 10, 144-149.
- Brolin, D., & Kokaska, C. Career education for handicapped children and youth. Columbus, OH: Merrill, 1979.
- Clark, G. M. Career education: A concept—A challenge. In S. E. Schwartz (Ed.), Institute on career education for the handicapped. University, AL: Project Retool, 1980.
- Copple, C., Schultz, D., & Self, J. Habilitation of rural educable mentally retarded adolescents: A handbook for educators. Final Report. Washington, DC: Office of Education (DHEW), 1969. (ERIC Document Reproduction Service No. ED 139 678)
- Cosby, A. G. Student attainment in relation to rural education. College Park, MD: The National Education Seminar, 1979. (ERIC Document Reproduction Service No. ED 172 981)

- Crain, E. J. Socioeconomic status of educable mentally retarded graduates of special education. Education and Training of the Mentally Retarded, 1980, 15, 90-93.
- Cullinan, D., & Epstein, M. H. Special education for adolescents: Issues and perspectives. Columbus, OH: Merrill, 1979.
- Deshler, D. D., Lowrey, N., & Alley, G. R. Programming alternatives for LD adolescents: A nationwide survey. Academic Therapy, 1979, 14, 389-397.
- Edington, E. D. Rural education: Key policy issues. Compact, 1980, 13, C1-C4.
- Florida Department of Education. Florida state plan for vocational education, Part II: Annual Program Plan, FY 1981. Tallahassee, FL: State of Florida, 1981.
- Halpern, A. S. General unemployment and vocational opportunities for EMR individuals. American Journal of Mental Deficiency, 1973, 78, 123-127.
- Halpern, A. S. Adolescents and young adults. Exceptional Children, 1979, 45, 518-523.
- Hamilton, J. B. Youth with special needs in non-metropolitan Ohio high schools. Ann Arbor, MI: University of Michigan Press, 1967. (ERIC Document Reproduction Service No. ED 123 897)
- Hayden, G. A work experience program in rural areas. Teaching Exceptional Children, 1975, 7, 130-133.
- Helge, D. A national comparative study regarding rural special education delivery systems before and after passage of PL 94-142. Murray, KY: Murray State University, 1980.
- Helge, D. Problems in implementing comprehensive special education programming in rural areas. Exceptional Children, 1981, 47, 514-520.
- Hensel, J. W. Working with handicapped students. Florida Vocational Journal, 1981, 6, 14-15.
- Herman, R. B. BEH preliminary report (draft copy). Washington, DC: Department of Health, Education and Welfare, 1979.
- Hutchinson, J. D. (Ed.). Report from the study group on vocational rehabilitation of the disabled disadvantaged in a rural setting. Washington, DC: Rehabilitation Services Administration, 1970. (ERIC Document Reproduction Service No. ED 953 847)

- Ingalls, R. P. Mental retardation: The changing outlook. New York: John Wiley & Sons, 1978.
- Jacobs, J. W. Gleaning: Sheltered employment for retarded adults in rural areas. Mental Retardation, 1978, 16, 118-122.
- Jacobsmeier, D. L. Rural education initiative: A report on the regional rural roundtables. Kansas City, MO: Office of Educational Programs, Region VII, February, 1980.
- Jeffords, J. M. Legislation and rural living. VocEd, 1980, 55, 8-11.
- Kernan, C. B. A follow-up study placed in educable mentally retarded classes who graduated from programs in the Northwest Bergen Council for Special Education (Doctoral dissertation, Rutgers University, 1979). Dissertation Abstracts International, 1979, 40, 3951-3952A. (University Microfilms No. 79-29, 201)
- Kokaska, C. J. Secondary education for the retarded: A brief historical review. Education and Training of the Mentally Retarded, 1968, 3, 17-26.
- Kokaska, C. J. The occupational status of the educable mentally retarded: A review of follow-up studies. The Journal of Special Education, 1979, 2, 369-377.
- Lussie, R. A., Hanford, K., O'Leary, E. Follow-up study of work programs located in the Eastern and Central Zones of Heartland Area Education Agency. Ankeny, IA: Heartland Education Agency, 1979. (ERIC Document Reproduction Service No. ED 187 071)
- Marsh, G. E., & Price, B. J. Methods for teaching the mildly handicapped adolescent. St. Louis, MO: C. V. Mosby, 1980.
- Mertens, D. M., Chafetz, S. E., & Nunez, A. R. Policy study for rural vocational and adult education. Columbus, OH: The National Center for Research in Vocational Education, 1981.
- Mock, W. L. A comparison of graduates of work study and traditional programs designed for those formerly labeled educable mentally retarded (EMR) (Doctoral dissertation, University of Southern California, 1974). Dissertation Abstracts International, 1974, 35, 4288A. (University Microfilms No. 74-31, 219)
- Nixon, G. R. A follow-up study pertaining to the occupational adjustment of educable mentally retarded pupils trained in Philadelphia public schools (Doctoral dissertation, Temple University, 1973). Dissertation Abstracts International, 1973, 22, 1924A-1925A. (University Microfilms No. 73-12, 118)

- Norton, R. E. Coordination of supportive services for vocational education students in rural areas. Final report. Fayetteville, AR: Arkansas University, 1970. (ERIC Document Reproduction Service No. ED 051 953)
- Porter, M. E. Effect of vocational instruction on academic achievement. Exceptional Children, 1980, 46, 463-464.
- Razeghi, J., & Davis, S. Federal mandates for the handicapped: Vocational education opportunity and employment. Exceptional Children, 1979, 45, 353-359.
- Redding, S. F. Life adjustment patterns of retarded and non-retarded low functioning students. Exceptional Children, 1979, 45, 367-368.
- Rosenfeld, S. A. Beyond nostalgia: A rural vocational education policy for the eighties. Compact, 1980, 13, 12-15. (a)
- Rosenfeld, S. A. Shaping of a rural vocational education policy. VocEd, 1980, 55, 17-19. (b)
- Schwartz, S. E., Hensel, J. W., & Westling, D. L. Evaluation of the vocational preparation and success of handicapped individuals who reside in rural areas: A continuation report. Tallahassee: Florida Department of Education, June, 1980.
- Sher, J. P. A proposal to end federal neglect of rural schools. Phi Delta Kappan, 1978, 60, 280-282.
- Stile, S. W. Improving the quality of special education in rural areas: The college of education's contribution. Compact, 1980, 13, 24-26.
- Titus, R., & Travis, J. Follow-up of EMR program graduates. Mental Retardation, 1973, 11, 24-26.
- Thompson, R. B. (Ed.). Florida statistical abstract 1980. Gainesville, FL: The University Presses of Florida, 1980.
- U.S. Department of Labor. Dictionary of occupational titles (4th ed.). Washington, DC: U.S. Government Printing Office, 1977.
- U.S. Department of Labor. Statistical abstract of the United States. Washington, DC: Bureau of the Census, 1979.
- U.S. Office of Education. Assistance to states for education of handicapped children: Procedures for evaluating specific learning disabilities. Federal Register, 1977, 42, 65082-65085.

- Vande Garde, L. C. (Ed.). Post high school adjustment of the educable mentally retarded. Des Moines: Iowa State Department of Public Instruction, 1973. (ERIC Document Reproduction Service No. ED 953 847)
- Walker, R. W. What vocational education teachers should know about disadvantaged youth in rural areas. Columbus, OH: Center for Vocational and Technical Education, 1971. (ERIC Document Reproduction Service No. ED 059 353)
- Young, E. B. Vocational education for handicapped persons: Handbook for program implementation. Washington, DC: Office of Education, 1971. (ERIC Document Reproduction Service No. ED 056 176)

APPENDIX A
FORMER SPECIAL EDUCATION STUDENTS RECORD FORM

County: _____ Date: _____
High School: _____
Source: _____

	<u>Name</u>	<u>Category</u>	<u>Year Grad/WD</u>
1.	_____	_____	_____
2.	_____	_____	_____
3.	_____	_____	_____
4.	_____	_____	_____
5.	_____	_____	_____
6.	_____	_____	_____
7.	_____	_____	_____
8.	_____	_____	_____
9.	_____	_____	_____
10.	_____	_____	_____
11.	_____	_____	_____
12.	_____	_____	_____
13.	_____	_____	_____
14.	_____	_____	_____
15.	_____	_____	_____
16.	_____	_____	_____
17.	_____	_____	_____
18.	_____	_____	_____
19.	_____	_____	_____
20.	_____	_____	_____
21.	_____	_____	_____
22.	_____	_____	_____
23.	_____	_____	_____
24.	_____	_____	_____
25.	_____	_____	_____

APPENDIX B
STUDENT CURRICULUM QUESTIONNAIRE

Name _____
Code No. _____

Demographic Information

- (1) Code No. _____ (2) Sex: M F
(3) Race B W H (4) DOB ____ / ____ / ____
(5) Address _____
_____ Phone _____
(6) Relative's Address _____
_____ Phone _____
(7) School Termination Date ____ / ____ / ____ (8) Graduated _____
(9) Withdrew _____ (10) Highest Grade Completed _____
(11) Months Out of School: _____ (12) Upon Leaving School _____
(13) (a) Was/Not Employed _____ (b) Enrolled in Postsecondary Ed _____

School Background Grades 9-12

- (14) Special Education Classification _____
(15) (a) Vocational Coursework _____ (b) Years/Credits _____

(16) Days Absent Last Year of School _____
(17) Reading Level _____ Test _____ Year _____
(18) Math Level _____ Test _____ Year _____

APPENDIX C
EMPLOYMENT QUESTIONNAIRE

1. Subject No. _____
2. Address _____
_____ Phone _____
3. The subject is currently:
(a) _____ Employed (b) _____ Unemployed Indefinitely
(c) _____ Homemaker (d) _____ Unemployed Seasonally
4. Name of Employer _____
Location: _____
Position: _____
5. Months employed _____ Hours/Week _____
Salary: \$ _____ per _____ \$ _____ month
6. Brief description of job and setting. _____

7. Employed previously? _____ yes _____ no
8. Location: _____
9. Position: _____
10. Months employed _____ Hours/Week _____
11. Salary: \$ _____ per _____ \$ _____ month
12. Brief description of job and setting. _____

APPENDIX D
ADDITIONAL ACADEMIC INFORMATION

Prevocational and Vocational Credits

Course	Mean	Standard Deviation	Maximum	Minimum
Prevocational Agriculture	.24	.05	4.0	0.0
Prevocational Home Economics	.70	.85	4.0	0.0
Prevocational Industrial Arts	.56	.76	3.0	0.0
Prevocational Workstudy	.49	.86	3.0	0.0
Agriculture	.37	.77	3.0	0.0
Business Education	.10	.44	3.0	0.0
Drafting	.27	.35	3.0	0.0
Home Economics	.55	1.00	5.0	0.0
Mechanics	.27	.89	6.0	0.0
Health Occupations	.10	.56	3.0	0.0
Work Experience	.75		6.0	0.0

Appendix D—Continued

Frequency of Prevocational and Vocational Courses

Course	Credits	Number	Percent
Prevocational Agriculture	0	91	80.5
	1	19	16.8
	2	1	.9
	3	2	1.8
Prevocational Home Economics	0	58	51.3
	2	35	31.0
	3	17	15.0
	4	1	1.8
Prevocational Industrial Arts	0	65	57.5
	1	36	31.9
	2	9	8.0
	3	3	2.7
Prevocational Workstudy	0	83	73.5
	1	12	10.6
	2	13	11.4
	3	5	4.4
Agriculture	0	88	77.9
	1	11	9.7
	2	11	9.7
	3	3	2.7
Business Education	0	106	93.8
	1	5	4.4
	2	0	0.0
	3	2	1.8
Drafting	0	98	86.8
	1	5	4.4
	2	4	3.5
	3	6	5.3
Home Economics	0	81	71.7
	1	12	10.6
	2	13	11.5
	3	5	4.4
	4	1	.9
	5	1	.9

Appendix D—Continued

Course	Credits	Number	Percent
Mechanics	0	99	87.6
	1	5	4.4
	2	4	3.5
	3	4	3.5
	4	0	0
	5	0	0
	6	1	.9
Health Occupations	0	109	96.5
	1	0	0
	2	0	0
	3	4	3.5
Work Experience	0	67	59.3
	1	23	20.4
	2	14	12.3
	3	5	4.4
	4	2	1.8
	5	1	.9
	6	1	.9

Months Out of School

Mean	20.3	Standard Deviation	9.9
Range	44.0	Maximum	48.0
Minimum	4.0		

APPENDIX E
CORRELATIONAL STATISTICS

Sex	ETI Mean	SD	Number
M	64.8	41.4	68
F	38.7	40.2	26
ALL	56.6	39.2	94

ANOVA: F-Ratio = 8.06

SIG = .0056

Race	ETI Mean	SD	Number
B	54.9	39.1	51
W	60.8	44.2	43
ALL	57.6	41.4	94

Special Education Category	ETI Mean	SD	Number
SLD	78.1	37.4	26
EMR	49.9	40.6	67
ED	40.0	0.0	1
ALL	57.6	41.4	94

Appendix E—Continued

 Highest Grade, Reading Level, and Math Level
 Regressed with ETI

	Multiple R	R Square	Adjusted R ²	Standard Error
Highest Grade	.35	.12	.11	38.99
Math Level	.44	.19	.17	37.64
Reading Level	.46	.21	.18	37.55

 ETI By Vocational Credits

Number of Credits	Mean ETI	SD	N
Four or More	62.6	38.5	50
Three or Less	52.9	44.1	44
ALL	57.6	41.4	94

ANOVA F = 1.559
 SIG = .21

 ETI By AVA

AVA Level	Mean ETI	SD	N
1	80.9	27.3	50
2	31.1	38.8	44
ALL	57.6	41.4	94

Appendix E—Continued

 Pearson Correlation: Vocational Courses and AVA

	VoEd	AVA
ETI	0.1451	-0.6032
	P = .081	P = 0.00

 AVA and ETI Agreement

	N
Cases Matched	63
Cases Nonmatched	8
Cases Not Applicable (i.e., students)	23

APPENDIX F

RAW DATA

Subject No.:	1	2	3	4
Age	19.1	21.05	22.11	20.01
Sex	F	F	M	F
Race	B	W	B	B
Highest Grade	12	12	12	12
Sp. Ed. Class	EMR	EMR	SLD	EMR
No. Months out of School	22	48	48	20
Prevoc. Cr.	0	0	0	0
Voc. Cr.	4	4	4	3
ETI	.09	N/A	N/A	90
Reading Level	3.3	2.8	3.5	4.6
Math Level	3.9	5.3	4.9	6.1
Test	CTBS	R	R	R
Prev. Employ.	F	0	N/A	F
Curr. Employ.	U	0	N/A	U
Months Full	2	0	N/A	18
Months Part	0	0	N/A	0
Months Student	0	0	48	0
Position	Dishwasher	Homemaker	Student	Rest. Cook
Salary	\$ N/A	\$ N/A	\$ N/A	\$ 128.00
AVA	Underemployed	N/A	N/A	Underemployed

Appendix F—Continued

Subject No.:	5	6	7	8
Age	19.0	20.0	22.0	20.0
Sex	M	M	M	F
Race	B	W	W	W
Highest Grade	12	10	12	12
Sp. Ed. Class	EMR	SLD	SLD	EMR
No. Months out of School	22	27	34	22
Prevoc. Cr.	0	0	0	1
Voc. Cr.	2	1	4	1
ETI	100	0	100	N/A
Reading Level	1.7	3.8	5.4	-
Math Level	3.9	5.0	5.3	-
Test	R	CTBS	R	-
Prev. Employ.	N/A	N/A	F	N/A
Curr. Employ.	F	N/A	F	N/A
Months Full	22	0	34	0
Months Part	0	0	0	0
Months Student	0	0	0	0
Position	Family Bus. Lawn Care	Jail	Welder/ Pipefitter	Homemaker
Salary	\$ 134.00	N/A	\$ 152.00	N/A
AVA	Success. Employed	Under- employed	Successful	N/A

Appendix F—Continued

Subject No.:	9	10	11	12
Age	19.0	17.1	18.1	19.0
Sex	F	M	M	M
Race	B	W	W	W
Highest Grade	12	10	9	10
Sp. Ed. Class	EMR	SLD	SLD	ED
No. Months Out of School	22	7	15	15
Prevoc. Cr.	0	1	0	0
Voc. Cr.	2	0	1	1
ETI	14	100	100	40
Reading Level	5.4	6.8	5.7	7.9
Math Level	3.9	9.4	4.6	4.4
Test	R	CTBS	CTBS	R
Prev. Employ.	F	N/A	N/A	U
Curr. Employ.	U	F	F	F
Months Full	3	7	15	6
Months Part	0	0	0	0
Months Student	0	0	0	0
Position	Dishwasher	Bricklayer	Shrimper	Companion to Invalid
Salary	N/A	\$200.00	\$134.00+	\$ 50.00
AVA	Under- employed	Successful	Successful	Under- employed

Appendix F—Continued

Subject No.:	13	14	15	16
Age	22.0	20.1	19.1	20.1
Sex	M	F	M	F
Race	W	W	W	W
Highest Grade	12	12	12	11
Sp. Ed. Class	EMR	SLD	SLD	ED
No. Months Out of School	22	22	15	23
Prevoc. Cr.	2		0	1
Voc. Cr.	2		2	0
ETI	100	N/A	93	N/A
Reading Level	3.9	-	3.8	5.0
Math Level	3.3	-	6.2	4.4
Test	R	-	R	R
Prev. Employ.	N/A	0	F	-
Curr. Employ.	22	N/A	F	-
Months Full	22	0	14	-
Months Part	0	0	0	-
Months Student	0	12	0	-
Position	Road Dept. Worker	Student	Surveyor's Helper	Homemaker
Salary	\$200.00		\$150.00	
AVA	Successful	N/A	Successful	N/A

Appendix F—Continued

Subject No.:	17	18	19	20
Age	19.0	20.4	19.1	20.1
Sex	F	M	M	F
Race	W	B	B	W
Highest Grade	12	12	12	10
Sp. Ed. Class	EMR	SLD	SLD	EMR
No. Months Out of School	10	22	10	22
Prevoc. Cr.	1	1	0	1
Voc. Cr.	1	0	1	
ETI	N/A	100	100	14
Reading Level	4.3	6.6	4.0	6.0
Math Level	2.0	3.0	6.1	6.3
Test	C	R	R	CTBS
Prev. Employ.	F	F	F	F
Curr. Employ.	N/A	F	S	U
Months Full	3	15	2	3
Months Part	0	0	0	0
Months Student	0	7	8	0
Position	Homemaker	Carpenter/ Elec. Helper	Benchwork/ Student	Maid
Salary		\$134.00		\$134.00
AVA	N/A	Successful	Successful	Under- employed

Appendix F—Continued

Subject No.:	21	22	23	24
Age	18.0	18.1	19.1	19.1
Sex	M	M	F	F
Race	W	B	W	W
Highest Grade	11	10	12	12
Sp. Ed. Class	SLD	SLD	EMR	EMR
No. Months Out of School	12	27	10	10
Prevoc. Cr.	1	1	1	1
Voc. Cr.	1		1	3
ETI	83	100	90	90
Reading Level	5.5	4.5	4.6	4.6
Math Level	6.0	6.3	1.5	2.9
Test	CTBS	C	R	R
Prev. Employ.	F	U	N/A	N/A
Curr. Employ.	F	F	U	U
Months Full	10	27	0	0
Months Part	0	0	0	0
Months Student	0	0	9	9
Position	Laborer/ Groundskeeper		Student	Student
Salary	\$150.00			
AVA	Successful		N/A	N/A

Appendix F—Continued

Subject No.:	25	26	27	28
Age	20.0	17.0	20.0	20.04
Sex	M	M	M	M
Race	W	W	B	W
Highest Grade	12	10	12	11
Sp. Ed. Class	EMR	SLD	EMR	EMR
No. Months Out of School	22	5	15	15
Prevoc. Cr.	1	1	0	0
Voc. Cr.	3		3	2
ETI	100	0	100	13
Reading Level	5.6	10.4	3.5	7.3
Math Level	4.4	9.8	3.4	5.3
Test	R	CTBS	R	CTBS
Prev. Employ.	N/A	U	N/A	F
Curr. Employ.	F	U	F	U
Months Full	22	0	15	2
Months Part	0	0	0	0
Months Student	0	0	0	0
Position	Armed Service	None	Armed Service	Laborer/ Unemployed
Salary	\$134.00		\$134.00	
AVA	Successful	Under- employed	Successful	Under- employed

Appendix F—Continued

Subject No.:	29	30	31	32
Age	19.0	19.06	19.06	19.1
Sex	M	M	M	M
Race	B	W	W	W
Highest Grade	10	12	12	12
Sp. Ed. Class	EMR	SLD	SLD	SLD
No. Months Out of School	27	10	10	10
Prevoc. Cr.		1	0	0
Voc. Cr.		0	2	3
ETI	7	100	55	100
Reading Level	5.0	4.6	4.2	2.8
Mathematics Level	3.9	6.1	9.9	4.9
Test	R	R	R	R
Prev. Employ.	F/J	F	P	N/A
Curr. Employ.	U	F	P	F
Months Full	2	10	3	10
Months Part	0	0	5	0
Months Student	0	0	0	0
Position	Laborer/ Jail	Navy	Groundskeeper/ Gas Sta. Attend	Carpenter's Assist.
Salary		\$134.00	\$134.00	\$134.00
AVA	Under- employed	Successful	Under- employed	Successful

Appendix F—Continued

Subject No.:	33	34	35	36
Age	20.1	19.1	19.1	20.1
Sex	M	M	M	M
Race	B	W	W	B
Highest Grade	12	11	12	12
Sp. Ed. Class	EMR	SLD	SLD	EMR
No. of Months Out of School	10	12	10	22
Prevoc. Cr.	0	0	3	3
Voc. Cr.	3	6	4	8
ETI	0	100	100	55
Reading Level	4.2	6.5	4.4	2.3
Math Level	3.4	6.1	4.9	2.9
Test	R	R	P	R
Prev. Employ.	0	N/A	F	U
Curr. Employ.	U	F	F	F
Months Full	0	12	10	12
Months Part	0	0	0	0
Months Student	0	0	0	0
Position	Unemployed	Air Force	Utilities Lineman	Seasonal- Citrus
Salary		\$134.00	\$160.00	\$134.00
AVA	Under- employed	Successful	Successful	Under- employed

Appendix F—Continued

Subject No.:	37	38	39	40
Age	21.1	19.1	20.0	22.0
Sex	M	M	M	M
Race	W	B	W	W
Highest Grade	12	12	12	12
Sp. Ed. Class	SLD	EMR	EMR	SLD
No. of Months Out of School	34	12	22	34
Prevoc. Cr.	1	3	3	2
Voc. Cr.	4	0	3	7
ETI	47	100	100	100
Reading Level	12.8	2.8	7.7	9.5
Math Level	10.3	3.3	3.4	12.9
Test	P	R	R	P
Prev. Employ.	N/A	F	N/A	F
Curr. Employ.	S	F	F	S
Months Full	0	12	22	34
Months Part	0	0	0	0
Months Student	34	0	0	0
Position	N/A	Food Serv./ Seasonal Wkr.	Nurse's Aide	Lg. Engine Mechanic
Salary		\$180.00	\$134.00	
AVA	N/A	Successful	Successful	Successful

Appendix F—Continued

Subject No.:	41	42	43	44
Age	20.1	19.0	21.0	21.0
Sex	M	F	M	M
Race	B	B	B	B
Highest Grade	12	12	12	12
Sp. Ed. Class	EMR	EMR	EMR	EMR
No. Months Out of School	22	10	34	34
Prevoc. Cr.	3	2	3	6
Voc. Cr.	7	3	5	9
ETI	100	60	53	53
Reading Level	2.2	2.8	1.3	2.0
Math Level	3.9	2.9	2.3	4.9
Test	R	R	R	R
Prev. Employ.	F	U	U	U
Curr. Employ.	F	F	F	F
Months Full	22	6	18	18
Months Part	0	0	0	0
Months Student	0	0	0	0
Position	City Maint./ Food Service	Nursing Home Housekeeper	Seasonal	Seasonal
Salary	\$134.00	\$134.00	\$180.00	\$180.00
AVA	Successful	Successful	Under- employed	Under- employed

Appendix F—Continued

Subject No.:	45	46	47	48
Age	19.0	21.0	19.1	22.0
Sex	F	M	M	M
Race	B	W	B	W
Highest Grade	12	12	12	12
Sp. Ed. Class	EMR	SLD	EMR	EMR
No. Months Out of School	10	34	10	46
Prevoc. Cr.	2	0	3	0
Voc. Cr.	7	2	6	3
ETI	20	100	0	78
Reading Level	3.2	6.6	4.2	-
Math Level	3.4	12.9	3.4	-
Test	R	P	R	-
Prev. Employ.	P	0	U	F
Curr. Employ.	U	F	J	F
Months Full	0	34	0	36
Months Part	4	0	0	0
Months Student	0	0	0	0
Position	Unemployed	Fam. Constr. Business	Jail	Apt. Maint./ Drives Van
Salary		\$250.00		\$134.00
AVA	Under- employed	Successful	Under- employed	Successful

Appendix F—Continued

Subject No.:	49	50	51	52
Age		20.0	20.1	20.0
Sex	M	F	M	F
Race	B	W	W	B
Highest Grade	12	12	12	12
Sp. Ed. Class	SLD	SLD	EMR	EMR
No. Months Out of School	22	10	22	10
Prevoc. Cr.	0	1	3	1
Voc. Cr.	3	3	8	6
ETI	55	100	77	N/A
Reading Level	6.2	2.8	6.5	2.4
Math Level	4.9	4.6	3.9	2.3
Test	P	P	R	R
Prev. Employ.	U	F	P	0
Curr. Employ.	F	F	F	H
Months Full	12	10	12	0
Months Part	0	0	10	0
Months Student	0	0	0	0
Position	Custodian	Waitress	Food Service/ Fam. Lawn Bus.	N/A
Salary	\$134.00	\$134.00	\$207.00	
AVA	Successful	Successful	Successful	N/A

Appendix F—Continued

Subject No.	53	54	55	56
Age	18.1	18.0	18.1	20.0
Sex	M	M	M	M
Race	B	B	B	B
Highest Grade	12	9	12	12
Sp. Ed. Class	SLD	EMR	EMR	SLD
No. Months Out of School	10	19	10	22
Prevoc. Cr.	1	3	4	2
Voc. Cr.	9	0	0	3
ETI	N/A	58	90	100
Reading Level	4.7	2.5	2.2	3.2
Math Level	8.4	2.1	2.9	6.7
Test	P	P	R	P
Prev. Employ.	0	P	F	S
Curr. Employ.	S	F	F	F
Months Full	0	7	9	12
Months Part	0	8	0	0
Months Student	10	0	0	10
Position	N/A	Seasonal- Citrus	Grounds- keeper (CETA)	Citrus Mach. (nonseasonal)
Salary		\$180.00	\$180.00	\$180.00
AVA	N/A	Under- employed	Successful	Successful

Appendix F—Continued

Subject No.:	57	58	59	60
Age	19.0	19.1	19.1	19.1
Sex	F	M	M	M
Race	B	B	B	B
Highest Grade	12	12	11	10
Sp. Ed. Class	EMR	EMR	EMR	EMR
No. Months Out of School	10	10	22	23
Prevoc. Cr.	3	3	3	3
Voc. Cr.	3	2	2	0
ETI	N/A	50	41	0
Reading Level	3.9	1.8	2.4	5.8
Math Level	3.4	2.9	3.9	2.9
Test	R	R	R	R
Prev. Employ.	0	F	P	0
Curr. Employ.	H	U	F	J
Months Full	0	5	6	0
Months Part	0	0	6	0
Months Student	0	0	0	0
Position	N/A	Laborer-Crate Mill-Seasonal	Seasonal- Citrus-Veg.	Jail
Salary		\$134.00	\$134.00	
AVA	N/A	Under- employed	Under- employed	Under- employed

Appendix F—Continued

Subject No.:	61	62	63	64
Age	21.1	20.0	18.0	18.1
Sex	M	M	M	F
Race	B	W	B	B
Highest Grade	12	12	12	9
Sp. Ed. Class	SLD	SLD	EMR	EMR
No. Months Out of School	22	10	10	36
Prevoc. Cr.	3	3	9	1
Voc. Cr.	3	0	3	0
ETI	45	100	100	0
Reading Level	2.8	6.5	1.5	-
Math Level	5.7	9.9	2.9	-
Test	R	P	R	-
Prev. Employ.	P	0	0	U
Curr. Employ.	P	F	F	U
Months Full	0	10	10	0
Months Part	20	0	0	0
Months Student	0	0	0	0
Position	Seasonal	Fam. Constr. Business	Caladium Fields (seas.)	Unemployed
Salary	\$134.00	\$250.00	\$134.00	
AVA	Under- employed	Successful	Under- employed	Under- employed

Appendix F—Continued

Subject No.:	65	66	67	68
Age	17.1	19.0	18.1	19.1
Sex	M	F	F	F
Race	W	B	B	B
Highest Grade	10	12	10	12
Sp. Ed. Class	SLD	EMR	EMR	EMR
No. Months Out of School	6	10	31	22
Prevoc. Cr.	1	1	1	1
Voc. Cr.	1	1	0	2
ETI	100	85	0	100
Reading Level	2.8	2.0	-	1.9
Math Level	4.2	3.2	-	2.2
Test	R	R	-	R
Prev. Employ.	0	P	U	F
Curr. Employ.	F	F	U	F
Months Full	6	7	0	22
Months Part	0	3	0	0
Months Student	0	0	0	0
Position	Constr. Laborer	Custodian/ County Road Dept.	N/A	Fast Food Prod. Leader
Salary	\$180.00	\$128.00		\$134.00
AVA	Under- employed	Successful	Under- employed	Successful

Appendix F—Continued

Subject No.:	69	70	71	72
Age	18.1	23.0	19.1	19.0
Sex	F	M	M	M
Race	B	B	W	W
Highest Grade	12	12	12	12
Sp. Ed. Class	EMR	EMR	EMR	EMR
No. Months Out of School	10	34	10	24
Prevoc. Cr.	0	0	1	3
Voc. Cr.	5	3	1	0
ETI	50	100	15	113
Reading Level	-	2.0	2.1	1.9
Math Level	-	1.9	3.2	3.2
Test	-	R	R	R
Prev. Employ.	P	S	P	P
Curr. Employ.	0	F	U	F
Months Full	10	29	0	24
Months Part	0	0	3	6
Months Student	0	5	0	0
Position	Seasonal	Housekeeping/ Maintenance	Diary/ Unemp.	Dairy/ Outside Man
Salary		\$134.00		\$224.00
AVA	Under- employed	Successful	Under- employed	Successful

Appendix F—Continued

Subject No.:	73	74	75	76
Age	21.1	20.1	18.1	19.0
Sex	F	M	F	F
Race	W	W	B	W
Highest Grade	12	12	12	9
Sp. Ed. Class	EMR	EMR	EMR	EMR
No. Months Out of School	34	21	10	37
Prevoc. Cr.	2	2	2	0
Voc. Cr.	0	6	3	1
ETI	1	114	38	N/A
Reading Level	1.5	1.9	-	-
Math Level	3.9	3.3	-	-
Test	R	R	-	-
Prev. Employ.	U	P	S	U
Curr. Employ.	P	F	P	S
Months Full	0	21	0	0
Months Part	1	6	6	0
Months Student	0	0	2	12
Position	Maid/ Unemployed	Dairy/ Outside Man	Seasonal/ HRS Client	HRS Client
Salary	\$25.00	\$224.00	\$135.00	
AVA	Under- employed	Successful	Under- employed	N/A

Appendix F—Continued

Subject No.:	77	78	79	80
Age	18.1	19.1	21.0	19.0
Sex	M	M	F	M
Race	B	W	B	W
Highest Grade	9	10	11	9
Sp. Ed. Class	EMR	SLD	EMR	EMR
No. Months Out of School	24	24	34	36
Prevoc. Cr.	0	1	0	2
Voc. Cr.	1	2	1	1
ETI	13	N/A	100	50
Reading Level	3.0	2.3	2.9	2.3
Math Level	3.5	3.0	3.3	3.0
Test	R	R	R	R
Prev. Employ.	U	U	F	F
Curr. Employ.	F	S	F	F
Months Full	3	0	34	18
Months Part	0	0	0	0
Months Student	0	18	0	0
Position	CETA Const. Manual Labr.	Job Corps	Fast Food Cook	Laborer/ Apprentice
Salary	\$160.00		\$134.00	\$160.00
AVA	Successful	N/A	Successful	Successful

Appendix F—Continued

Subject No.:	81	82	83	84
Age	18.1	19.0	22.0	22.1
Sex	M	M	M	F
Race	W	W	W	B
Highest Grade	12	9	12	12
Sp. Ed. Class	SLD	EMR	EMR	EMR
No. Months Out of School	8	29	22	34
Prevoc. Cr.	2	0	1	1
Voc. Cr.	5	2	1	3
ETI	100	40	70	35
Reading Level	3.5	4.4	6.5	3.6
Math Level	3.9	4.0	7.6	3.9
Test	R	R	R	R
Prev. Employ.	F	U	S	P
Curr. Employ.	F	F	F	P
Months Full	8	12	7	0
Months Part	0	0	0	24
Months Student	0	0	12	0
Position	Dairy/ Outside Man	Army	Dishwasher	School Aide
Salary	\$224.00	\$134.00	\$134.00	\$67.00
AVA	Successful	Successful	Successful	Under- employed

Appendix F—Continued

Subject No.:	85	86	87	88
Age	21.0	19.0	21.1	18.0
Sex	M	F	M	F
Race	B	B	B	B
Highest Grade	11	12	12	10
Sp. Ed. Class	EMR	EMR	EMR	EMR
No. Months Out of School	25	10	24	4
Prevoc. Cr.	1	2	2	3
Voc. Cr.	0	5	5	
ETI	48	70	100	N/A
Reading Level	3.0	3.7	3.5	3.1
Math Level	4.5	3.8	3.5	3.6
Test	R	W	CTBS	W
Prev. Employ.	F	U	0	N/A
Curr. Employ.	U	F	F	N/A
Months Full	12	7	34	0
Months Part	0	0	0	0
Months Student	0	0	0	0
Position	Busboy/ Unemployed	Teacher Aide	Factory Laborer	Homemaker
Salary		\$134.00	\$160.00	
AVA	Under- employed	Successful	Successful	N/A

Appendix F—Continued

Subjjet No.:	89	90	91	92
Age	19.1	20.0	20.0	21.0
Sex	F	M	M	F
Race	B	W	B	B
Highest Grade	11	12		12
Sp. Ed. Class	EMR	EMR	EMR	EMR
No. of Months Out of School	10	22	22	34
Prevoc. Cr.	5	3	5	6
Voc. Cr.	2	1	0	1
ETI	N/A	45	9	N/A
Reading Level	2.7	2.7	2.5	-
Math Level	2.7	2.7	4.1	-
Test	W	CTBS	C	-
Prev. Employ.	N/A	J	F	0
Curr. Employ.	N/A	F	U	0
Months Full	0	10	2	0
Months Part	0	0	0	0
Months Student	0	0	0	0
Position	Homemaker	Saw Dust Truck Driver	Seasonal- Tobacco	Homemaker
Salary		\$134.00		
AVA	N/A	Under- employed	Under- employed	N/A

Appendix F—Continued

Subject No.:	93	94	95	96
Age	20.1	19.0	21.0	18.1
Sex	M	M	M	F
Race	B	B	B	B
Highest Grade	12	12	10	12
Sp. Ed. Class	EMR	EMR	EMR	EMR
No. Months Out of School	22	10	32	10
Prevoc. Cr.	3	2	2	3
Voc. Cr.	3	2	2	1
ETI	0	100	0	70
Reading Level	1.0	1.6	1.8	3.5
Math Level	3.0	3.5	1.0	3.8
Test	CTBS	W	CTBS	W
Prev. Employ.	U	0	U	P
Curr. Employ.	U	F	U	F
Months Full	0	10	0	6
Months Part	0	0	0	2
Months Student	0	0	0	0
Position	Unemployed Indefinitely	Butcher/ Farm Wrkr.	Unemployed Indefinitely	Seamstress/ Custodial
Salary		\$164.00		\$134.00
AVA	Under- employed	Successful	Under- employed	Successful

Appendix F—Continued

Subject No.:	97	98	99	100
Age	19.1	20.0	18.1	21.1
Sex	M	M	M	F
Race	B	B	W	W
Highest Grade	12	12	11	12
Sp. Ed. Class	EMR	EMR	EMR	EMR
No. Months Out of School	10	22	7	34
Prevoc. Cr.	2	2	1	3
Voc. Cr.	2	2	0	1
ETI	100	55	.85	74
Reading Level	-	2.7	1.8	-
Math Level	-	4.1	2.6	-
Test	-	CTBS	CTBS	-
Prev. Employ.	F	U	U	0
Curr. Employ.	F	F	S	S
Months Full	10	12	0	0
Months Part	0	0	0	0
Months Student	0	0	6	25
Position	Paving Co. Laborer	Fumigator	Student	Student
Salary	\$250.00	\$134.00		
AVA	Successful	Under- employed	N/A	N/A

Appendix F—Continued

Subject No.:	101	102	103	104
Age	21.0	20.0	19.1	19.1
Sex	M	F	F	M
Race	B	B	W	B
Highest Grade	12	12	12	11
Sp. Ed. Class	EMR	EMR	EMR	EMR
No. Months Out of School	18	32	22	22
Prevoc. Cr.	2	2	3	3
Voc. Cr.	2	3	0	0
ETI	100	N/A	47	27
Reading Level	-	2.3	3.7	3.3
Math Level	-	2.1	5.9	3.0
Test	-	CTBS	CTBS	CTBS
Prev. Employ.	0	F	0	U
Curr. Employ.	F	H	S	P
Months Full	18	6	0	0
Months Part	0	0	0	12
Months Student	0	0	22	0
Position	Groundskeeper	Homemaker	Student	Pulpwood Fac. (seasonal)
Salary	\$150.00			\$150.00
AVA	Successful	N/A	N/A	Under- employed

Appendix F—Continued

Subject No.:	105	106	107	108
Age	22.0	20.0	20.0	19.1
Sex	F	F	M	F
Race	B	W	B	B
Highest Grade	12	12	12	11
Sp. Ed. Class	EMR	EMR	EMR	EMR
No. Months Out of School	34	22	34	14
Prevoc. Cr.	2	3	3	1
Voc. Cr.	2	3	3	2
ETI	50	50	100	N/A
Reading Level	-	-	2.8	3.1
Math Level	-	-	2.0	2.6
Test	-	-	CTBS	CTBS
Prev. Employ.	0	0	0	0
Curr. Employ.	P	P	S	H
Months Full	0	0	0	0
Months Part	34	22	0	0
Months Student	0	0	34	0
Position	Sheltered Work	Family Chicken Bus.	Student	Homemaker
Salary		N/A		
AVA	N/A	N/A	N/A	N/A

Appendix F—Continued

Subject No.:	109	110	111	112
Age	20.0	19.0	20.0	21.0
Sex	F	F	M	F
Race	B	B	B	B
Highest Grade	12	11	10	12
Sp. Ed. Class	EMR	EMR	EMR	EMR
No. Months Out of School	22	14	13	34
Prevoc. Cr.	3	3	2	3
Voc. Cr.	2	1	1	
ETI	N/A	43	0	N/A
Reading Level	3.1	3.7	2.0	2.4
Math Level	1.6	3.4	4.0	3.4
Test	W	W	W	CTBS
Prev. Employ.	0	0	U	0
Curr. Employ.	H	S	U	H
Months Full	0	0	0	0
Months Part	0	0	0	0
Months Student	0	6	0	0
Position	Homemaker	Student	Unemployed	Homemaker
Salary				
AVA	N/A	N/A	Under- Employed	N/A

Appendix F—Continued

Subject No.:	113
Age	20.0
Sex	M
Race	B
Highest Grade	12
Sp. Ed. Class	EMR
No. Months Out of School	10
Prevoc. Credits	1
Voc. Credits	1
ETI	100
Reading Level	2.6
Math Level	5.4
Test	P
Prev. Employ.	0
Curr. Employ.	S
Months Full	0
Months Part	0
Months Student	10
Position	Student
Salary	
AVA	N/A

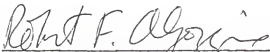
BIOGRAPHICAL SKETCH

Diane Marie Budd is a native Floridian, born in Orlando on April 19, 1949. She received a Bachelor of Arts degree in education from the University of Central Florida (formerly Florida Technological University) in 1973. She was employed as a prevocational and vocational counselor for multihandicapped students for several years. She also taught emotionally handicapped and learning disabled students.

In 1979, she received a Master of Education degree from the University of Florida. The focus of her studies was vocational education for special needs students. During the two years she worked on her master's degree she was employed by the Orange County Schools Florida Diagnostic and Learning Resource Service and by the University of Central Florida (Vocational Department).

The doctoral program at the University of Florida provided Diane with a variety of interesting and educational employment opportunities. During 1979-80, she worked as a project assistant with the national RETOOL Project. During 1980-81, she was employed as full-time director of the Rural Research Project. Currently she works for the Department of Special Education supervising graduate practicum students.

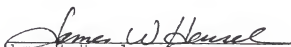
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Robert F. Algozzine, Chairman
Associate Professor of Special
Education

I certify that I have read this study and that in my opinion it conforms to acceptable standards of scholarly presentation and is fully adequate, in scope and quality, as a dissertation for the degree of Doctor of Philosophy.


Charles Forgnone
Professor of Special Education


I certify that I have read this study and that in my opinion it conforms to acceptable standards of scholarly presentation and is fully adequate, in scope and quality, as a dissertation for the degree of Doctor of Philosophy.


James W. Hensel
Professor of Instructional
Leadership and Support


I certify that I have read this study and that in my opinion it conforms to acceptable standards of scholarly presentation and is fully adequate, in scope and quality, as a dissertation for the degree of Doctor of Philosophy.


Cecil D. Mercer
Professor of Special Education

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Margaret K. Morgan
Associate Professor of Instructional
Leadership and Support

I certify that I have read this study and that in my opinion it conforms to acceptable standards of scholarly presentation and is fully adequate, in scope and quality, as a dissertation for the degree of Doctor of Philosophy.


Stuart E. Schwartz
Associate Professor of Special
Education

This dissertation was submitted to the Graduate Faculty of the Department of Special Education in the College of Education and to the Graduate Council, and was accepted as partial fulfillment of the requirements for the degree of Doctor of Philosophy.

December, 1981

Dean for Graduate Studies
and Research